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Geo. Combe

1857.

From a painting by Sir John Watson Gordon, President of the Royal Scottish Academy.

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Ebenezer Pawsett Glenerk Jack Keith

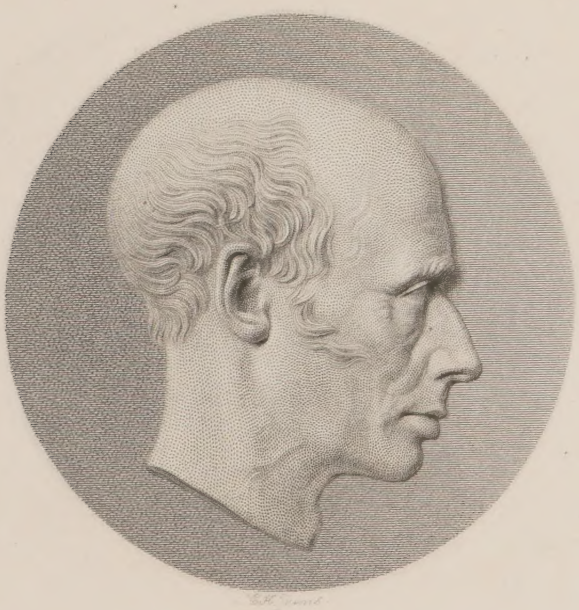
# THE LIFE

OF

# GEORGE COMBE,

AUTHOR OF "THE CONSTITUTION OF MAN."

By CHARLES GIBBON.



IN TWO VOLS.

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FROM FIRST DRAFT OF "THE CONSTITUTION OF MAN"

Fac-simile of George Combe's handwriting. 1827.

2dly Organized Substances & Beings stand higher in the scale of creation, & are subjected to a set of Laws peculiar to themselves. ~~This class comprehends all existences~~ ~~objects~~ The distinguishing characteristic of this class of objects is that they ~~are~~ individuals of them derive their existence from ~~the~~ other organised beings, are nourished by food, ~~&~~ & go thro' a regular process of growth, & decay. Vegetables & animals are the two great subdivisions of it. The organic laws are different ~~from~~ ~~& superior to~~ from & the merely physical. ~~Thus~~ A stone for example does not spring from a parent stone, it does not take food from ~~the~~ its parent, the earth, as it

# LIFE OF GEORGE COMBE.

## CHAPTER I.

1837–1838.—A NEW LIFE — BARRISTERS AND ATTORNEYS — LOCAL PREJUDICES—UNPOPULARITY IN EDINBURGH—CONTINUED OPPOSITION TO THE "CONSTITUTION OF MAN"—LECTURES IN MANCHESTER—RICHARD COBDEN—CAUSES OF PHRENOLOGY BEING DEAD IN GERMANY—MIRACLES—CLAIMS OF GALL AND SPURZHEIM—PROJECTED COURSE OF LECTURES IN GERMAN—GALL ON THE CEREBELLUM—TUNE—LECTURES IN BATH AND BIRMINGHAM—THE QUEEN—BARON STOCKMAR—EDUCATION FOR THE LEGAL PROFESSION—REASON AND GOD—DEPARTURE FOR AMERICA.

COMBE entered upon a new life at the beginning of the year 1837. The long-desired epoch had arrived when, with a substantial private income, he could devote all his time and energy to the propagation of phrenology. How ardently he had yearned for this privilege has been shown in the frequent expression of his hope that he might one day attain it. He had now the proud satisfaction of knowing that he had attained it by hard and zealous work. He began the new life quietly, and at once entered upon a systematic arrangement of the tasks which he proposed to perform; they were to be the continuation of those which he had been already engaged in, and the completion of their objects so far as time and health might permit. Phrenology and education obtained his first thoughts, and in these subjects his mind embraced everything that could tend to the moral and social improvement of man-

kind. For himself he was as eager to acquire knowledge as in his youth: he continued his studies in anatomy and physiology and chemistry, and he gave an hour every morning, before breakfast, to the German language. He did not seek leisure in his independence, but the means to do good in a wider sphere than had been hitherto open to him.

His retirement from the legal profession caused much regret amongst his clients, who, with few exceptions, accepted his recommendation to transfer their business to his friend and former assistant, Mr Robert Ainslie. The directors of the Shotts Iron Company, whom he had served for ten years as secretary, passed an unanimous vote of thanks to him, accompanied by the presentation of a handsome piece of plate. He was, naturally, gratified by these tokens of esteem, because they gave proof that in his devotion to science he had in no way neglected business. One of his last acts in connection with his profession was to write a defence of its respectability against what he regarded as an implied slur upon it in the biography of Sir Walter Scott.

*Barristers and Attorneys.*

"In Sir Walter Scott's autobiography, just published by John Gibson Lockart, his son-in-law, Sir Walter states various reasons for declining an offer made to him by his father to become his partner as a writer to the signet, to which profession Sir Walter had served an apprenticeship with his father, and for preferring the bar, the import of which is disparaging to the inferior branch of the profession. I do not know what might be the relative character in moral and intellectual respectability of writers to the signet and advocates in Sir Walter's day, but I know what they have been in mine, and I am twenty years his junior, and I differ considerably from his estimate. The points on which there can be no dispute are, that the gentlemen of the bar have by their education and professional practice greater knowledge of composition, written and oral, more comprehensive views of the *principles* of law; and greater talents of reasoning, than the writers to the signet; and if Sir Walter had confined himself to this claim of superiority it would have been undoubtedly well founded.

But he insinuates that the *morale* of the attorney is inferior to that of the barrister, and to this I demur.

"In Scotland, writers to the signet are employed in various branches. Some act chiefly as agents in litigations. These are the men with whom the barristers come chiefly into contact; and as litigation is a warfare in which victory is contended for at all hazards, within the limits of the rules prescribed by the law and by the forms of court, it is naturally to be supposed that the most adroit, energetic, and able combatant will be preferred by those who need to hire a champion. The writers to the signet, whose chief occupation lies in conducting litigations, are men whose natural qualities fit them for this duty; and while some of them acknowledge the obligation of natural morality in their mode of conducting their cases, and preserve their individual character as gentlemen, there are others who acknowledge no law, human or divine, but the law of Scotland, and even this only in so far as it presents an obstacle to the attainment of the objects of their clients which they can neither evade by subtlety nor subvert by falsehood. This latter division in my day was small, not comprehending more than five or six individuals of the whole profession, and they were well known. They used to be designated as 'agents,' in contradistinction to gentlemen.

"This class of writers comes most into contact with the barristers, because almost the exclusive occupation of the latter is to conduct litigation. And if these be unprincipled agents who scruple at nothing, he will be a bold man who will deny that there are always to be found men at the bar (of great and undoubted respectability) who lend their services most cordially to back and support these agents in their most desperate cases. We used to speak familiarly of an agent, now no more, who was accustomed to manufacture evidence, and to invent facts in his cases, or at least to alter the aspects of facts to such an extent that they might fairly be viewed as new. And this agent had a highly respectable and religious counsel in his usual employment who brought forward these new facts with all the confidence of a man who knew personally their truth; and he had another counsel, of great rank at the bar and influence with the bench, who acted as senior to the other, and threw the mantle of his respectability over the whole proceedings of his agent and junior brother. It used to be said of this man that he would gain any case that was in itself debateable, *and depended on evidence*, if he got money enough. On one occasion, when a W.S. himself was prosecuted for an

error in some deed, this senior counsel recommended to him to employ this gifted brother to conduct his defence.

"The gentlemen at the bar, as I have said, are employed chiefly in litigation, which is a warfare. They say that they assume that the cases are *bona fide*, such as their briefs represent them to be; and I do not quarrel with the statement. The client is entitled to the decision of the judges, and if counsel in general refused to plead any cases except those of the perfect justice of which they were entirely satisfied, they would constitute themselves the judges, and obstruct the access of suitors to the bench, instead of opening it, as is the object of their institution. Besides, they cannot know the case on the other side, until both be pleaded, and may therefore really, in many instances, believe their clients to have well-founded claims until the contrary has been proved. But allowing them the benefit of all these concessions, their chief occupation is still acting as the mouth-pieces of men who are contending under the very grovelling passions the proximity to which they regard as degrading the agent. No doubt they are one step removed from the concoction of the mischief, and the tale of fiction or perversion is presented to them ready formed and dressed in the most plausible colours; but the disguise is too thin not to be easily penetrated, and they are as conscious of maintaining falsehood as the agent himself, who drew up their briefs. These, however, are the cases, and only some of the cases, conducted by acknowledged 'agents,' and got up to gratify passions of the basest order, for the sake of money. But the great multitude of causes conducted in the Supreme Court of Scotland in my day had two really debateable sides. They were cases in which the most honest and clearsighted men might differ in opinion, and in acting as the organs of such litigants, whether as agents or counsel, there was no immorality, but the reverse, especially if the cases were conducted in a fair *bona fide* spirit, which in general they were. The counsel, however, in such causes was not in any degree a higher *moral* actor than the agent. He might be a more intellectual one, but on the score of respectability and high-mindedness the two practitioners were, in my opinion, on a par.

"The other department of a barrister's practice is giving advice in his chambers, on cases submitted to him for opinion. This is a dignified, intellectual occupation; but as the advice is given exclusively on legal grounds, it is much more intellectual than moral. There is no *immorality* in it, but there is as little scope for the direct practice of any of the moral virtues. The moral faculties enter into the constitution of a sound judgment,

and were so far part of the instruments employed, in giving the advice; but the rules of morality were not those according to which the counsel advised an act to be done or to be abstained from."

It was curious that, at the time when he was preparing to give the remainder of his life to phrenology, a rumour should have gone abroad that he had renounced its principles as explained in his "System." A report to this effect was sent to him from Birmingham. He at once gave an emphatic denial to the absurd rumour, by proclaiming the purpose for which he had retired from the law; and he could also have directed attention to the large and increasing number of disciples of the science in proof of its progress. Mr Hewett C. Watson, F.L.S., who became the editor of the *Journal* after the publication of the September (1837) number, showed in his "Statistics of Phrenology" that there were 92 societies in England, Scotland, and Ireland devoted to its study; whilst in London phrenological busts were sold in almost every chemist's and stationer's shop. But in Edinburgh the position of phrenology continued to be unsatisfactory. The Society had been weakened by the secession of the evangelical party and by the attacks of Mr W. Scott more than had at first seemed probable. Combe personally found his position an awkward one, as he explains in a letter to Professor Nichol:—

"I have some *friends* whose Love of Approbation is a stronger principle than their Conscientiousness and Adhesiveness; they have dropped from me one by one, owing to no cause of personal offence. I am unpopular! With the exception of Maclaren and Robert Chambers there is no man pretending to literary attainments here who does not shun my society. In the law circles I am dropped entirely. In short, you cannot conceive the extent to which the small passions have placed a wall of circumvallation around me; and, so far as I can discover, all on account of my philosophical and religious opinions, for I believe there are few men who personally are more inoffensive in their conduct than I am, or whose moral reputation is more unimpeachable.

"This letter is a vast effusion of egotism, but I wish you to

understand my real position and not to be led away by your own generous enthusiasm in overestimating my pretensions. Do not suppose that I am complaining or unhappy. The friends whom I have are invaluable, and although not numerous they are sufficient for my enjoyment; and the texture of my own mind renders me very indifferent to the rest of the world. I am sometimes forced to wish for a little more general respect for Mrs Combe's sake. She lived, till she married me, in the focus of public and spontaneous admiration. She has passed all at once into the very opposite condition. But she finds a compensation in the truths which I have taught her, in the improvement of her own nature, and in the affection of which she is the ceaseless object—and we are happy."

Combe was sensitive about his unpopularity in Edinburgh, although he philosophically resigned himself to it, and looked forward to the day when the truths which he advocated would be generally acknowledged. As for Mr Scott's book, "The Harmony of Phrenology with Scripture," which was extensively advertised as a complete refutation of the philosophical errors of the "Constitution of Man," Combe wrote a brief paragraph in the *Phrenological Journal* stating that the book was full of perversions and misrepresentations of the doctrines taught in his work. He regarded the attack as "an example of the immolation of truth, reason, and philosophy at the shrine of political and religious prejudice." He declined to answer it in detail, because the "Constitution of Man" had obtained such an extensive circulation that it could not suffer from misrepresentation; and "if its merits were not sufficient to support it against attacks ten times more powerful than this, it deserved to fall." This was rightly understood to be Combe's manifesto, and no reply was expected from him. But Professor Nichol in the *Scotsman*, and Mr H. C. Watson in a pamphlet, undertook the defence. Mr Watson, by collating a single chapter of the "Harmony" with the text of the "Constitution," exposed so many misquotations and perversions of the sentences that, although a second edition and a "people's" edition of the attack were announced, they never appeared.

Combe's unpopularity affected the Society, and it continud in a somewhat languid state. He was therefore glad to see the "Edinburgh Ethical Society" formed by the young men who had attended his lectures. He believed that it was from the rising generation he was to expect the full fruits of his philosophy. Mr Robert Cox acted as secretary of this society until, resigning the law (although only twenty-five) at the same time as his uncle, in order to devote himself to literature and science, he accepted the post of secretary to the Literary and Philosophical Society of Liverpool, and consequently removed from Edinburgh. It is worth noting the fact that at this period of local persecution Combe was placed by the authorities on the Commission of the Peace.

Whilst Combe was made to feel uncomfortable in his native city, the invitations to lecture from other towns in Scotland and from England became more numerous than ever, and the requests for his presence in the United States more urgent. He was consoled, too, by many proofs that his much-assailed book was producing its effect upon his countrymen in awakening their minds and causing them to look at nature with their own eyes. Attempts were made to turn it out of many local libraries on the ground of its infidelity; but this sometimes revealed unexpected defenders,—as at Leith, where, on the proposal being made to ban the book, the leading member of the library committee declared in favour of the "Constitution," and said that if it were expelled he would go with it. Thereupon the hostile movement was abandoned. As the sale and influence of the book increased, the opposition multiplied in proportion. The clerical party, in their publications and from the pulpit, denounced it and Combe as direct emanations from Satan. There was even an "Appeal to the People of Scotland" got up against it, but this effort proved futile. "It is the 'Constitution of Man' which has brought all this visitation on my head," Combe wrote, "yet the sales of it are enormous for a book of its kind, and all my other works enjoy a degree of

public favour that assures me that I have written against only the prejudices or the interests of a class, and not against the common sense, or common morality, of human nature."

Amongst other consolations for whatever discomforts the Edinburgh evangelical party inflicted on him was the recognition he obtained from men who laboured like himself to advance the education and morals of the people. Various philosophical and educational works were dedicated to him: Mr Samuel Smiles sent him his first work—on "The Physical Education of the Young"—soliciting his opinion of it, because the subject was one which had been most ably dealt with by him. On 7th December 1837, William Chambers wrote to him:—

"DEAR SIR,—Allow me to present you with two small treatises on the early departments of natural philosophy, the second of which has just been finished, and is about to be put in circulation. If we were in the way of dedicating books, I do not know any one to whom these treatises could be more appropriately addressed than to yourself. In writing them I have throughout been governed by the philosophical principles—the doctrine of human improvability—which you have so ably elaborated; and have taken some pains to render the subject intelligible in a way which I should hope will meet the approbation of those who wish to see the spread of scientific education."

Combe gave warm praise to the treatises referred to, and in regard to the general work in which the brothers Chambers were engaged he said: "I can only repeat that you are doing more for the physical, moral, and intellectual improvement of the United Kingdom than all its established clergy put together." He added, in reference to himself: "It gives me great pleasure to learn that the philosophical principles which I have endeavoured to unfold serve you in any useful way in your important labours. Such assurances fortify me in living tranquilly under the odium which the bigoted and ignorant endeavour to excite against me."

Another proof of the influence of his work was afforded by

an offer which he received of the chair of mental and moral philosophy in the University of Michigan, United States, which was established in 1837. But although he would have been glad of such an appointment in one of the ancient universities of the old country, he declined the present offer, because he saw a much more extensive field of usefulness before him in teaching his science wherever there appeared to be a desire to understand it, than he could possibly have found in one of the youngest states of America. Still this offer presented an additional attraction to visit that country.

He therefore remained wonderfully tranquil and proceeded to make arrangements for his proposed course of lectures in Manchester. The absence of Mr Cobden caused a slight misunderstanding to arise between Combe and the Manchester Committee. Before pledging himself to go there he required a guarantee of an audience of at least 400. Some objections were made to this demand; but it was the course he always adopted, for the reasons stated in the following note addressed to Mr James Adam, editor of the *Aberdeen Herald*:—

"Will you tell me candidly how the conditions on which I insisted preparatory to my visit to Aberdeen were viewed by yourself and the Committee. My motive for asking is this: that the same conditions have been ill received in Manchester, and I have been a good deal annoyed; I wish to know if the fault is with me, or the Manchester Committee. My view of the matter is this: Phrenology is treated with ridicule or contempt. I am independent of the necessity of lecturing for support. My only motive, therefore, is to knock that ridicule and contempt on the head. The best way of doing so, is to make the science appear interesting and respectable. The grand element in producing this effect is to secure a *large and respectable* audience to hear my exposition of its merits. As people in general care nothing about the science and nothing about *me*, it is impossible for me to secure such an audience at a town to which I am invited. To go and lecture to a small audience would increase the prejudice, damage the interests of the science, waste my time and labour, prove injurious to my reputation, and disagreeable to my feelings. Some one, therefore, must take steps to muster a suitable number of hearers.

In requesting a committee to do so by canvassing and explanation, am I unreasonable? In insisting for 200 at Aberdeen and 400 at Manchester, do I appear to be actuated by a mercenary spirit, and to be seeking money only? That is what the Manchester people hint at. I paid Dr Spurzheim £2, 2s. for 12 lectures of one hour each, and he never lectured under £1, 1s. for 12 lectures. To do away with the impression of my motive in insisting for a guarantee of a large number being money, I lower my fee to 10s. 6d., and I strain every nerve to give great pennyworths of information even for that sum."

The difficulty between Combe and the Manchester Committee was easily overcome, and his conditions complied with in every respect. He proceeded to that city in April, and found that 470 tickets for the course of lectures had been sold; and at the end of the lectures he learned that there had been 1207 visitors admitted at 1s. 6d. each, being an average of 86 visitors each night. The Committee handed him £264 as the proceeds of the course, after deducting all expenses, those of his hotel included. He delivered an extra lecture on education for the benefit of Mr William Bally, who had been some time an assistant to Spurzheim, and was at this time settled in Manchester as a maker and seller of casts. The single lecture cleared over £40. The foregoing facts will sufficiently indicate the impression which Combe made in Manchester. His audiences were interested and impressed by his exposition of the new science, and he won many zealous followers. The success of his lectures was so great that his stay in the city was like a constant jubilee. Mr Cobden returned from the Continent before his departure, and the friendship which they had formed in correspondence was confirmed by personal acquaintance. Writing to Dr Combe he says:—

"I examined Mr Cobden's head.* It is of an average size. The temperament nervous and bilious. The propensities are moderate; the anterior lobe large, the lower region predominating; and the sentiments are large. Concentrativeness is only

* Mr Cobden was at this date 33 years of age.

rather full; Benevolence is very large; Veneration large; and Conscientiousness and Firmness full; Combativeness is only full; and Cautiousness and Secretiveness are large, the latter at least is so, and Cautiousness a little less. His person is slender, lungs narrow, and his aspect refined and intellectual. He had read the 'Constitution of Man' before he wrote his pamphlets; and said that it seemed to him like a transcript of his own familiar thoughts. Under the inspiration of a moderate Combativeness and large Benevolence he is adverse even to defensive warfare; and considers that the Quakers have suffered less by submitting to every insult, and cruelty, and robbery quietly, than other men by resisting them. He has a number of curious facts in illustration of the power of mere goodness to protect against outrage. This was the only point in our discussions on which he and I differed. I regarded defence as justifiable and necessary. On my voyage home I read Mungo Park's travels in Africa, and saw to what an amazing extent mere passive submission to every robbery, insult, abuse, and privation, without murmuring or resistance, had operated as a protection from violence. If he had resisted he would have been slain in an instant. This, and the success of the Quakers, however, is obviously peculiar. They are few in the midst of an overwhelming mass of brute force, and their submission is wisdom; but for a nation like England to submit to be robbed by any invader who chooses to visit her shores seemed to me to be nonsense; and I could account for his views only by Mr Cobden's peculiar organization."

On his return to Edinburgh he made his will, leaving the copywrights and stock of all his books to Dr Combe and after him to Robert Cox; his estate he bequeathed in various proportions to his brother and nephews and nieces. This was preparatory to his departure for the Continent. On the 20th May, with Mrs Combe, and accompanied by Miss Stirling Graham of Duntrune, he proceeded to Germany, where they spent three months visiting the principal towns and institutions as formerly, but now with more leisure at his command. It was in the course of this excursion that he became acquainted with Mr Thomas Horloch Bastard, of Charleston, Dorset, whose philanthropic nature and labours at once inspired Combe with admiration and respect. To Dr Hirschfeld (the

translator into German of the "System" and the "Constitution") he wrote when on his way home:—

ROTTERDAM, 29*th September* 1837.

"You may now write to me in German, but use the Roman character, as my Form is sadly puzzled by the German written hand. I have never had an hour for reading since I entered your country, for every moment was occupied in travelling, in visiting collections, in going to theatres, &c., &c., so that I have made far less progress in the language than I ought to have done. Still, I can now clear my way in travelling by asking questions, and comprehending answers; and I mean to devote a good deal of time this winter to the study of it. I have, at present, the intention of returning to Germany with Mrs Combe to reside for a longer or shorter time, and if I find myself capable of acquiring as much of the language as to lecture in it, I would visit Prussia and Bavaria, and Hanover, and lecture in the chief towns; but I fear that at my period of life, approaching fifty, this is too difficult an enterprise. I cannot decide until I go home, and I would not, in any circumstances, leave Scotland before May next. I shall be glad to hear what you think of the idea? Would your countrymen come to hear me? All that I could expect would be to excite an interest in the subject, and set them agoing to study it.

"The causes of phrenology being dead in Germany are several:—1st, It appears to me never to have been alive in it: Drs Gall and Spurzheim delivered a few oral instructions at a time when the doctrine was very far from being matured. They made no practical pupils—that is, they taught nobody to observe. They published no works in German which could enable their disciples to advance in the doctrine, and the interest which they excited was merely temporary. 2d, The war and the misfortunes of Germany prevented the public mind from taking an interest in a mere doctrine. 3d, Political power frowned upon it; and in Austria, where most had been done to disseminate the doctrine, power is omnipotent. Lastly, There is a good deal of truth in your remark that the Germans are not easily persuaded to attend to facts which do not in the first instance satisfy their reasoning faculties. They appear to me, but I am so ignorant that I cannot pretend to judge, to be fond either of the sentimental without reason, or of abstract metaphysical conceptions without sentiment; and that a relish for a philosophy which shall combine and harmonize both feelings and strict logical reasoning is new to them, and is one for which their minds are not yet prepared. My present visit has

done nothing for phrenology in Germany, because I have merely shown my face, and disappeared. The only cause of hesitation whether I shall return to Germany is, that a vast field of usefulness is open to me in the United States of America. I know the language of that country, they esteem my books, and their free institutions and active minds fit them to receive instruction. I could do little good in Germany in comparison with what I could accomplish there, and I am almost ashamed to own that my reason for preferring Germany is a personal one. Mrs Combe and I are led to fear that we should not like the climate, the manners, and the modes of living in America, while we are charmed with dear Germany, as we call it. Time must decide."

During his tour he received from the secretary of the Association for Popular Lectures an application to deliver a course of phrenology in Edinburgh in the ensuing winter; and in reply he announced his determination not to lecture again in his native town for several years to come. That resolve was made partly because of the indifference with which the majority of his fellow-townsmen regarded the science, and partly because he believed that the hostile feeling towards it was directed more against him personally than against phrenology; and he believed that the Association could find a teacher who would be able to give instruction without this disadvantage. In any case, he considered that in the meantime it would be better for the cause he advocated, more agreeable to his own feelings, and ultimately more advantageous to the Edinburgh public, for him to leave them alone for a few years. By and by, perhaps, the progress of the new philosophy in other cities and countries might dispose the citizens to receive its lessons in a spirit different from that which they displayed at present. One more indication of the opposition to his philosophy reached him about this time: Dr Fossati's translation of the "Elements of Phrenology" was placed by the Pope on the *Index Expurgatorius.*

He was glad to be able to turn from these unpleasant experiences to the first important work of his friend Professor

Nichol, entitled "The Architecture of the Heavens," which he regarded as "valuable in a high degree as a means of destroying superstition." In reference to superstition, he wrote the following comments on Mr Babbage's calculations of the testimony to miracles in the 9th "Bridgewater Treatise."

"Your brother kindly lent me Babbage's 9th 'Bridgewater Treatise,' which I read with much interest. It is a curious specimen of a vigorous mind wanting the science of man's nature to render its views harmonious and sound. Whewell's taunt that mathematicians are often incapable of general reasoning is true when the mathematician is distinguished only by large knowing organs. (Whewell himself belongs to some extent to this class, and I do not regard him as so profound and comprehensive a thinker as he apparently believes himself to be.) But his remark does not hold good when applied to mathematicians in whom the reflecting organs also are large as well as the knowing ones, which I infer to be the case with Babbage. His argument, or rather miscalculation, about the extent of testimony necessary to prove a miracle, appears to me to be unsound. First, his miraculous event is no miracle. It seems to be one only to ignorant men; but if the Deity pre-arranged all the operations of nature to produce a certain event at a certain stage of evolution, that event is obviously natural, and is the direct result of the changes that preceded it, and man would see it in this light if he could comprehend the causes. It is a trick, therefore, to make him believe that it is a miracle. Farther, an event happening in the course of nature can never logically be adduced as proof of a religious doctrine. Suppose some philosopher had discovered the cause of the November meteors before any one else had observed them, and had announced a new religion, and said that 'on the 12th of November 1836, I shall cause stones to fall from heaven to prove it,' this might have passed for proof until the fall was discovered to be the result of purely physical causes, acting altogether independently of religious principles and considerations; after this discovery was made, it would become a proof of the existence and action of these physical causes, but of nothing else.

Again, Babbage takes the number of instances in which men speak the truth to be one in a hundred. If the fact spoken to relates to everyday events, and if the attention of the observers was specially called to them, this may be nearly correct. But if it be one of an unusual and unnatural kind, there is not one man

in ten thousand who has testified to such events and has been found by experience to speak the truth. How much testimony have we that men have seen the devil, have seen the spirits of the dead, or the bodies of the absent (facts which the doctrine of spectral illusion explains); and yet who believes these testimonies? If 100,000,000 of lies of this kind have been told since the world began, and if not one single instance of the real appearance of any of these persons has yet occurred, Mr Babbage has to find the proportion between that number and nothing, and then discover by his calculating machine how many times Zero would counterbalance 100,000,000; and then he will have a logical case or formula for determining what amount of testimony will suffice to prove that a man truly dead came alive again. These phenomena all belong to the class of the extra or ultra-natural; and there is a want of logic in holding that the same amount of truth in testimony which occurs in regard to natural events also occurs in favour of supernatural. All this, however, I fear is blaspheming and unbelief, to use the current cant of the day."

In the same year Dr Elliotson published his "Physiology of the Animal Functions," in which the doctrines of Gall regarding the nervous system were upheld, and Spurzheim was accused of having availed himself of the discoveries of his master without making due acknowledgment. In defence of his friend Combe wrote to Mr Hewett C. Watson:—

"In regard to Dr Gall, Dr Elliotson's book cannot overstate his merits as the discoverer, or overestimate the value of his physiology of the brain; but it does overrate both his moral and intellectual character in my humble opinion. Gall was a man of splendid genius and great powers of observation and reflection; but he had very little of the analytic spirit and talent which is necessary to reach first principles or primitive faculties in mental philosophy. He described largely and vaguely the manifestations which he saw accompanying the organs when largely developed; but those accustomed to the precision of metaphysical thinking observe a want of definite conceptions regarding the primitive powers. Dr Spurzheim greatly excelled him in the discriminative quality, and I think, with all deference to Dr Elliotson, that he introduced great improvements into the science, by a more refined analysis than Gall ever used or seemed to be capable of. Again, Dr Gall is remarkably clear and always vigorous in his reasonings;

but he writes in an exaggerated and loose style, and many of his propositions and observations require modification. He was deficient in the organ of Conscientiousness, and in his works throughout I find him aiming rather at successful and pointed objection and argument than at sober and earnest truth. I do not mean to say that his statements are not essentially true; we know that they are; but they are not brought forward with the care and scrupulosity of a conscientious man. They resemble more the pleading of a talented barrister determined to make the most of his case, and to supply by his own talents any defects in the facts or evidence of his client's case. Dr Spurzheim was far more conscientious, scrupulous, and philosophical. It is quite true that Dr Spurzheim was Gall's pupil, but Spurzheim's writings show that he possessed a master mind, and we know that he added many important organs to those discovered by Gall. Dr Elliotson makes out an apparent case against Spurzheim in his notes, by quoting particular passages from Spurzheim's works, omitting all the passages in which he speaks of Gall. A case diametrically opposite could be got up by selecting all the passages in which Dr Spurzheim describes what Gall did. No one who reads Spurzheim's works can fail to see that he describes Gall as the discoverer and as his master. When Spurzheim came to England in 1814, and published his physiognomical system in 1815, only two volumes of Gall's large work had been printed, and they bore their joint names; they were little known in England; and Spurzheim taught us all we knew of the science for many years. Gall's book was printed in 1818, and bears his own name. But Spurzheim never pretended to dispute Gall's merits. On the contrary he spoke of him always with profound respect to me.

Elliotson is right, however, in blaming Spurzheim for his last alterations in the situations of the organs. He did this from some anatomical views, but I ever protested against it, and kept the Edinburgh busts and plates to the old standard. Vimont's plates and situations correspond closely with ours, and he is very accurate. My brother says that the last time that he saw Dr Spurzheim he talked with him on this subject, and Spurzheim was not so tenacious of the new markings as he had been, but seemed more disposed to give way and return to the old than he had ever found him before."

The question as to whether he was to return to Germany or to proceed to the United States was decided in favour of the latter course. He resolved to sail for New York in the autumn

of 1838 and to lecture in the States until May 1840; but on his return he proposed to go to Germany for three years to complete his knowledge of the language and to lecture there. He had so much respect for the Germans that he did not fear ridicule in attempting to teach them phrenology in their own tongue. He and Mrs Combe had enjoyed Germany so much that, apart from other considerations, they were anxious to return to it for the mere sake of living there.

As was his custom he began his preparations in good time. He wrote to his American publisher, Mr Nahum Capen, Boston, to Dr Caldwell, Dr Channing, and others who had urged him to visit the country, to give him information as to the accommodation of halls in the various towns, the expenses, &c., in order that he might arrange his course of action. In the meanwhile, as he was not to lecture during the winter of 1837-38, he occupied himself with the preparation of a translation of Gall's work on the "Functions of the Cerebellum," to which he added the views of Vimont and Broussais, and answers to the objections urged against phrenology by Drs Roget, Rudolphi, Prichard, and Tiedemann. In the physiological portions he was assisted by Dr Combe, and it was the latter who wrote the replies to Professor Rudolphi, Prichard, and Tiedemann. To this work Combe attached a translation by himself of Dr Gall's petition against an order by Francis I., emperor of Austria, prohibiting him from delivering lectures on the functions of the brain without special permission asked and obtained. This edict was the cause of Gall's banishment from his native country; and the immediate cause of it is thus explained in a letter written by Combe from Vienna, 23d July 1837:—

"Dr Gall resided in Vienna upwards of thirty years, and was recognised as an able physician. He was the friend of Dr Stoerk, physician to Maria Theresa, the Emperor Joseph, and also to Francis I. at the commencement of his reign. On a vacancy occurring in the office of medical counsellor of state, Dr Stoerk recommended Dr Gall to the Emperor Francis I.,

and the emperor expressed his readiness to give effect to the recommendation. Dr Gall, however, stated that he was not born for a court, and that he disliked the restraints which it would impose on him, and declined the intended honour; but he recommended Dr Stifft, who by the influence of Dr Stoerk was named to the vacant office. This occurred about the year 1794 or 1795. Dr Stifft in the course of time became physician to the emperor, and president of the faculty of medicine; and in this capacity he advised the emperor that phrenology was dangerous and immoral in its tendency, upon which opinion Gall was prohibited from teaching. Dr Stifft was a man of no talent as a physician, but a great politician and intriguer. He was styled 'Sa Majesté Médicinale' on account of his overwhelming influence and dogmatism. . . . . In 1814–15 the emperor of Austria saw Dr Gall at Paris after the Peace, and asked him to return to Vienna. He declined to do so, and assigned as his reason that he was now established in Paris, and would have to begin the world again if he returned to Vienna."

The preparation of the "Functions of the Cerebellum" occupied the winter months, and it was published in the spring of 1838. The book contained, besides the translation of Gall's essay, and the controversial papers already mentioned, a sketch of the structure and functions of the brain as bearing on the principles of phrenology, which was the production of George assisted by Andrew Combe. It formed the introduction to the work, and the most important part of it; but the reader was expressly warned that some portions of the exposition of the relation between the structure and functions of the brain were conjectures from established facts, and not set forth as established facts in themselves. Making this clear distinction, he examined the experiments of Magendie and Flourens, and showed that how ver little calculated they might be "to throw light on the functions of the convolutions, they produced phenomena which harmonised with the functions ascribed to these parts by Dr Gall." His whole object was to show the harmony existing between the best established views of the structure of the brain and the functions ascribed to it by phrenologists; and also to prove the truth of their assertion

—"that no well established anatomical or physiological facts have yet been brought to light that are inconsistent with their views."

Whilst he was occupied with this work Robert Chambers submitted to him the proofs of an article on "Music," in order to obtain any suggestions which phrenology might afford for its improvement. Combe's organ of Tune was small; but Mrs Combe was an accomplished musician, and under her direction and that of two other ladies, he supplied his friend with several useful notes. Music, like everything else, he regarded from a high stand-point.

"I admire very much your natural theology of Tune. I have often said that it and Colouring are among the most conspicuous examples of the divine benevolence, for these faculties produce such an immense extent of enjoyment by means that appear so little related to their ends, according to our conceptions, that only divine benevolence could have designed them, and divine wisdom established the relations between the human mind and the external elements which produce this enjoyment. The pure benignity of God in endowing us with musical perceptions is by far too little dwelt on, in ordinary treatises about music, and you do well to supply the want."

In March 1838, he commenced a double course of lectures in Bath,—that is, he lectured on Mondays, Wednesdays, and Fridays in the evening, when he had an average audience of 160 to 170; and on Tuesdays, Thursdays, and Saturdays, when he had a steady attendance of 150. The Committee was composed of gentlemen in practice as physicians and surgeons; and his discourses obtained profound attention from all. At the close of his labours the members of his classes entertained him at a public dinner, when an address, expressing the thanks of his auditors, and their belief in the value of the science which he taught, was presented to him by Dr Barlow, who was at that time the leading physician of the town. In May and June he lectured in Birmingham to a class of 300, besides casual hearers; and here again he produced a most gratifying effect.

An address and a piece of plate were presented to him at the end of his course in token of the appreciation of the benefits he had conferred on those who had attended his lectures. But the most satisfactory token of this esteem was the establishment of a Phrenological Society.

From Birmingham he proceeded on a visit to friends residing near Southampton, where Mrs Combe awaited him. Thence they made a short excursion to the Isle of Wight, and afterwards spent a week in Normandy. In this manner they delayed their visit to London in order to avoid the crush and bustle of the town during the coronation of the Queen. A few days after that event they arrived in London, and on the evening of 3d July they were at the opera ("I Puritani"). The Queen occupied a box almost directly opposite, and with the help of a good opera-glass Combe was able to observe her head very distinctly. He made the following memorandum of his observation :—

"She is fair and pale. Her head is rather above the average size for a woman, and is broader than the female head generally is. The coronal region is remarkably broad and rather high, particularly in the regions of Conscientiousness and Firmness. The middle region, comprising Veneration and Hope, seemed full ; Benevolence, Imitativeness, and Ideality were rather full. The anterior lobe seemed broad but not long from behind forward. The lower or perceptive organs were large, those of Form and Language very large. Time seemed large, and the upper or reflecting region was well marked, but inferior to the knowing region. The peripheral expansion is considerable, but there is a want of length in the upper region of the forehead. The expression of the countenance is that of simple good-nature and intelligence.

"I infer from these imperfect data that the queen has very considerable force of character, and is not a stranger to irrascibility ; but she has great powers of self-command. She has a very favourable combination of the propensities and sentiments ; and she will possess energy combined with tact and good sense. She will be firm, decided, and upright. She will be acute in observation and have a great memory for persons and languages. She will be apt to learn by observation

and experience. She possesses sufficient reflecting power to be able to appreciate principles—moral, political, or philosophical—when clearly pointed out to her. Her mind will at all times be most powerfully influenced by the feelings, and in order to lead her to any course of action the moral aspects of it should be first expounded, and then the consequences or effects. She will be naturally decided and firm to her purposes when fixed upon. From her sense of justice, if she once take up any position as morally right, it will be almost impossible to drive her from it: argument, opinion, or motives of any other kind will have less influence than the determinations of her own will.

"She is placed in a very trying position. The two systems—that of Conservatism, or the ascendancy of the privileged classes; and that of Reform, or the ascendancy of the enlightened portion of the people—waver in the balance, and her determination may give the victory to the one or the other for twenty years. She has the combination of faculties that would lead her to either side according to the external impressions. If her mind could be opened to a clear view of the philosophical and moral basis on which the Reform principle rests, viz., the natural tendency of the race to advance in moral and intellectual attainments, and the irresistible impulse which has now been given by the condition of society to this principle, she might go onward happily, steadily, and successfully as a reformer; lead a useful life, and one also full of enjoyment. If, on the other hand, she should be surrounded by flatterers who should teach her that the world is made for the privileged classes, and that the people are happiest when quietly enjoying the sweets of a nearly animal existence, she may glide insensibly into this way of thinking and act on it.

"There is a love of liberty which is not moral, but which springs from Self-esteem hating authority in others. Should she ever be brought into close contact with such reformers, her acute moral feelings will detect their inherent unworthiness, and she may be thrown at once into the arms of the opposite party. But if she be surrounded by advisers and friends who will represent the intrinsic moral merits or demerits of every course of action to her, respectfully, yet clearly and firmly, she will yield greatly to such influence. If possible she should be instructed in the elements of some of the physical sciences, such as chemistry or natural philosophy, that imply Causation, and in which distant effects result from combinations of causes. This kind of instruction would cultivate the powers which in her need most to be developed. A knowledge of the elements

of mental philosophy also, to enable her to discriminate character and resolve it into its first principles, would be very valuable."

At the house of Sir James Clark, the Queen's physician, Combe was introduced to Baron Stockmar, to whom he was already known by reputation and through the conversation of Dr Combe. A feeling of more than ordinary mutual respect sprung up between them at this first interview and continued throughout life: it also led in subsequent years to Combe being consulted regarding the education of the royal family. Writing to Dr Combe, who was at this date in attendance upon King Leopold at Laeken, Combe says :—

"I examined the Baron Stockmar's head, and found large *morale* with a fair intellect. He told me that both you and I had given him a large Wonder, which he was disposed to dispute. In other respects he seemed satisfied. I told him that his Destructiveness and Love of Approbation were the chief enemies in his combination, and Sir James Clark said that I was right. The Self-esteem is also well developed, although he thought that he had little; but here also Sir James confirmed my opinion. I had an hour's crack with the Baron alone, on ideas in general, and found him more perfectly of our way of thinking in morals, religion, and politics than any man, who was not a thorough phrenologist, whom I have ever seen. He has a high regard, as Sir James said, even an affection, for you."

The Doctor, in a letter to his brother, gives this story on Stockmar's authority :—

"The Baron, by the way, told us a characteristic anecdote of the Duke of Wellington's straightforward aptness for everything whether in his line or out of it. As Master of Trinity (I think) the duke required to be present at an annual sermon. He sent for Mr Melville, the great preacher of the day in London, and asked whether he had any objection to preach it. Mr Melville replied: 'None in the world.' 'Have you any objection to my choosing the text?' 'None,' said Melville, 'I shall be happy to adopt it.' 'The discourse ought to be quite appropriate to the occasion,' rejoined the duke, 'and I am anxious about it: will you allow me to give you the heads of the discourse?' Melville paused and then replied: 'Certainly, my lord, I will be glad to receive them.' The duke thereupon with great com-

posure gave him the text and heads, and sent him away to fill up an excellent disquisition! Stockmar says his authority is direct and true to the letter."

Having paid a hurried visit to Newgate, accompanied by Sir James Clark, Dr Arnot, and Mr H. C. Watson, Combe, with Mrs Combe, sailed to Aberdeen *en route* for Dingwall, in order to spend a few days with Sir George Mackenzie at Coul. He wrote to Sir James Clark informing him of the ignorant persistence of the passengers on board the steamer in keeping every cranny in the cabins closed against the *damp*—for the weather was warm—whilst they were complaining of sickness and suffocation. In the same letter he gave his advice regarding the education of a young gentleman who intended to adopt the law as a profession. Referring first to his surroundings he says:—

"The weather is beautiful, and I now write at a window which overlooks a large basin covered with the richest verdure, bordered first by a range of moderate-sized hills clothed to the summit with trees in their freshest foliage, and beyond them by an irregular line of lofty, bare, black, and picturesquely grouped mountains. It is a beautiful world when the mind harmonises with it.

"I have been thinking of the education of —— since I left you, and beg to express my opinion, with all deference to your own judgment, that he should be kept but a short time at Cambridge. Your object is his instruction: Greek, Latin, and mathematics, are the staples of Cambridge. A lawyer does not need much mathematics, for they do not teach him to reason as lawyers do; and he has acquired, I presume, a pretty good stock of Greek and Latin already. The law is a very extensive study; it requires almost exclusive attention; and it consists to so great an extent of details and artificial rules that devotion to it has the tendency to narrow the mind and keep out all other knowledge. Many of our greatest lawyers are ignorant, to a degree almost incredible, of everything else. My notion is, as —— is already seventeen, and has not much time to lose, that courses of chemistry, natural philosophy, and anatomy in the London University, would be a more profitable application of his time, combined with mathematics privately studied, or at a class. I include anatomy, and, if possible, physiology,

because these are indispensable to a correct understanding of questions of insanity and criminal legislation, as well as many questions relating to nuisance and personal injury. The ignorance of judges and lawyers in general on these topics is concealed only by its own density, and by the ignorance of the public being equal, for greater it cannot be. A thorough knowledge of law erected on the basis of a good scientific education is calculated to form a really enlightened mind."

On returning to Edinburgh the Combes took up their abode in furnished apartments for the few weeks they were to remain previous to their departure for America. Their house had been given up, and the principal articles of furniture sold by auction; so that a small house, or "flat," as it is called, sufficed to contain all the articles which he wished to retain and which would not be damaged by storage for several years. He had some misgiving about this breaking up of his household; but he felt that he had an important duty to fulfil and he was ready to make whatever sacrifice might be requisite. The profound respect with which he regarded his wife was intensified by her readiness to accompany him on what was even in 1838 regarded as a voyage only to be undertaken for very serious reasons. Indeed Mrs Combe had some fears as to their personal safety in New England, on which Dr Channing remarked:—

"I beg you to assure Mrs Combe that there is not the slightest ground for her apprehensions. In truth I could not read these without a smile. We look on New England as the safest spot on earth. Our cities have hardly the show of a police, so much do we rely on the habits of order in the people. A city in Europe of the size of Boston with no more force for its defence would be in imminent peril. The terrifying stories which reach you are very much from the new settlements, where the laws are necessarily weak; where the populations are very much scattered; and have more than the usual proportion of bold adventurers and fugitives from justice. In the older parts of the country a stranger has nothing to fear, nor will he be molested in the new if he does not meddle with local controversies. Our country suffers in Europe very unjustly from the fact that foreigners—especially your countrymen—receive

all their impressions of it from a few large cities where wealth and show are the idols, and where the timid, jealous love of property sees perils to itself from popular institutions. The mass of the people are true to freedom, and would repel indignantly the idea of exchanging their institutions for any other."

Combe had no need of this assurance so far as his own thought was concerned: he had profound faith in the future of the United States; and in regard to the one black spot on its fame—slavery—he wrote to Dr Channing, 28th March 1838:—"The cause of the abolition of slavery *must* prosper. The American population is essentially moral, and so great an iniquity cannot enduringly exist among them." Long before he had determined to visit America he repeatedly, in letters and in his private notes, expressed his admiration of the country and the people. He *believed* that they had a great future before them, which would be glorious to themselves and valuable as an example to the other nations of the world. He was not blind to the defects of the present; but he foresaw the possible glories of the future.

Amidst all the bustle of preparation for the voyage, he still found time to comment upon philosophical theories and to defend a fellow-citizen—James Ballantyne, Sir Walter Scott's partner and publisher—from misrepresentation. The following is from a letter to Archbishop Whately:—

"You were pleased in a former letter to express your acquiescence in the view given in my System, under the faculty of Causality, of the extent to which *reason* could discover the existence and attributes of God. It struck me lately that the inscription on the Grecian temple, "To the unknown God," was highly philosophical according to the Grecian lights. It implied a complete conviction of the *existence* of a god; but also so entire an ignorance of *the nature of his being*, and his place of residence, as to render him truly *unknown*. In pursuing the thought, I was impressed with the limited amount of human knowledge. We know matter only by its qualities. Phrenologically we see form, size, and colour, and appreciate weight; but of essence or substance we can form no conception.

Nevertheless, *Individuality* appears to me to give us the *conviction* that substance does *exist* (just as Causality gives us the conviction that efficiency or power *exists*), but without conveying the slightest notion of the essential nature of that substance. Our belief in efficiency or power, and in substance, is complete and irresistible, yet we know not what the things are in which we thus believe! Berkeley was excusable for denying matter, or rather for asserting that it is spirit. We cannot tell what it is, and are travelling through a world in which all that we can comprehend is truly relation and nothing more. We know that the relationships established between things, and between our own mind and them, give rise to certain impressions in us, but we can penetrate no deeper into the mysteries of nature. While our knowledge is thus limited, we have received a faculty and organ of Wonder, that leads those in whom it is excessive to desire to penetrate behind the veil which conceals essence and efficiency from our mental vision. All this looks as if man was only an embryo being, with instincts blindly groping for a higher state of existence. There is nothing new in these remarks, but I receive stronger impressions of human truths, when I am led to look at them through the phrenological telescope.

"I beg your Grace's acceptance of a pamphlet just published, being a refutation of Mr Lockhart's calumnies on John and James Ballantyne. The 'Refutation' is regarded as triumphant here, where the men and the facts are known. James Ballantyne was an honest man of amiable disposition and no mean talent. His fault was vanity and some formality and pomposity of manner; but this was mere weakness, and he had many excellent qualities. In his head Love of Approbation was enormously large, and Ideality considerable. He had a longing after the magnificent which manifested itself in pomposity of manner; but he was not cold, proud, or supercilious. As a specimen of his understanding I may mention that, when the Reform Bill was first under debate in Parliament, I met him about seven in the morning, walking in the neighbourhood of the Post Office, as many others were; and he talked with me for nearly an hour, asking *why* I was in favour of Reform. He pushed his inquiries until he forced out of me *every reason* that I could assign. In parting he told me that he had been doing the same thing for several mornings with every Whig, Tory, and Radical, capable of giving a reason, who would allow him to converse with them, and that his object was to discover which side would ultimately prevail, that he might embark his newspaper, the *Weekly Journal*, in support

of it. He ultimately declared in favour of Reform, to the fresh annoyance of Sir W. Scott. This was not like either a foolish or a dishonest man."

Combe was now verging on his fiftieth year, but his mind was still teeming with ideas of social improvement; and he was hopeful of a day to come when he might express them. At present his ideas were so unorthodox that he felt their utterance could do little good; and he was eager to find in America a new field of usefulness. "The man who sows good seed," he wrote in his journal at Edinburgh, 23d August 1838, "is a very important element in the abundance of the harvest. Whilst his own office is a very humble one, he knows that it is one of primary necessity, and that it leads to the most beneficial results. In this character I proceed to the United States. The seed which I carry is of a noble stock; the soil, I am assured, will prove fertile; and it is God who gives the increase. If we act in conformity with His laws His blessing is never withheld. May I be enabled to walk in His ways and to teach His truths to men."

On the 1st September he, with Mrs Combe, took the steamer from Leith to London, where they arrived safely after a delightful passage. All business arrangements had been satisfactorily made, so that Combe had only to say good-bye to Sir James and Lady Clark. On the Tuesday morning they proceeded by Great Western Railway to Maidenhead, and thence by coach to Bath, where they remained for one night. Then on to Bristol; and on Saturday, 8th September, they went on board the "Great Western," and took possession of the berths which had been secured for them. In the afternoon of that day the "Great Western" began its voyage.

# CHAPTER II.

1838–1840.—UNITED STATES—NEW YORK—BOSTON—GEORGE BANCROFT—COMMON SCHOOLS—HORACE MANN—SPURZHEIM—AMERICAN VISITORS—LECTURES IN BOSTON—MATERIALISM—HUMAN RESPONSIBILITY—PREACHING—DR CHANNING—NEWNESS OF THE COUNTRY—PHILADELPHIA—JOSEPH BUONAPARTE—THE SLAVE QUESTION—PRESIDENT VAN BUREN—JOHN QUINCY ADAMS—WASHINGTON—LECTURING IN AMERICA—A PHENOMENON—RAILWAY TRAVELLING—NIAGARA—ETHICS OF JUSTICE—CANADA AND THE CANADIANS—CAPE COTTAGE—PORTLAND IN MAINE—PHRENOLOGICAL CONTROVERSIES—OBSTACLES TO A THOROUGH EDUCATIONAL SYSTEM IN AMERICA—EFFECT OF LECTURES IN BOSTON—ALBANY—THE AMERICAN PEOPLE—EDUCATION—RELIGION—OPPOSITION OF EDINBURGH SOCIETY—LECTURES IN SPRINGFIELD AND ALBANY—PHRENOLOGY IN ENGLAND—PHYSIOGNOMY—"IS MR COMBE A BELIEVER IN CHRISTIANITY?" NEW-HAVEN—DISSECTION OF THE BRAIN—THE AMERICAN CHARACTER AND CUSTOMS—FAREWELL ADDRESS TO THE AMERICAN PEOPLE—HEREDITARY PEERAGE AND ESTABLISHED CHURCHES—THE FUTURE OF AMERICA—SECTS—EXCURSION TO THE WESTERN STATES—GENERAL HARRISON—THE VOYAGE HOME.

THE passage between the Old World and the New was made without more than the ordinary inconveniences. One equinoctial gale revealed to Combe the glories of the Atlantic waves, which during the first few days he had been inclined to think as short and cross as those of the English Channel. He altered his opinion when he saw "the sublimely moving masses of water rolling slowly, yet irresistibly on, embodying the very spirit of gigantic power and awful solemnity." Mrs Combe suffered severely throughout the passage, but was patient.

Amongst the passengers were Dr A. D. Bache, a great-grandson of Dr Franklin, and president of the recently

organised Girard College for Orphans, Philadelphia, who was returning from a tour of investigation of the educational institutions of Europe; and Mr Wilson, the Scottish vocalist, who good-naturedly helped to beguile the tedium of the way with some of his best songs. The "Great Western" had left England on the 8th September, and on the 25th anchored alongside the quay of New York; this was at the time regarded as a rapid passage. Combe found his Boston publisher, Mr N. Capen, waiting for him, and profited by his assistance in passing the luggage through the custom-house.

He had scarcely been an hour in the Carlton House Hotel, Broadway, when several members of the New York Phrenological Society called to give him a hearty welcome to America. They all assured him of complete success in the object of his visit, and arrangements were made for a course of lectures at the Clinton Hall in November, after he had finished at Boston; he also agreed to give six extra lectures on physiology applied to education, to the members of the Mechanics' Institute, to whom the hall belonged. These engagements, following so fast upon his arrival in the country, encouraged him to believe that the promises made to him would be fully realised.

He only remained three days in New York, but during that time he had made inquiries into the questions of currency and investments. He had the good fortune to be introduced to Mr John J. Palmer, manager of the Merchants Bank, who undertook to manage all his pecuniary affairs. From New York he sailed up the Hudson to Albany, where his brother William was settled as manager of a brewery. The day after his arrival in the town, the mayor of Albany, Teunis Van Vechten, and several trustees of the New Medical College, which was expected to be ready for pupils on the 1st January 1839, requested Combe to deliver the inaugural address. He was gratified by this mark of esteem, and regretted that his engagements rendered compliance with the request impractic-

able. Here, as in New York, he was greeted by people who knew him only through his works, and the prospect of the success of the project for which he had left home seemed clearer than ever. From Albany he travelled in a carriage by easy stages over 120 miles to Worcester, whence the remaining forty miles to Boston were traversed by train.

On visiting the custom-house to clear his boxes of casts and drawings, he found the collector to be Mr George Bancroft, the historian of the United States.

"Mr Bancroft, who is under forty, entered into familiar conversation with me about the philosophy of Locke, Kant, Stewart, &c., and compared them with phrenology. He quoted them readily and accurately, stopped to give instructions to all clerks who came to him on business, and then resumed. He had read my books and said civil things. He is the author of the best history of the United States. He has a high nervous and bilious temperament, good anterior lobe, the lower predominating, and great firmness."

Although within three days of the date fixed for the commencement of his lectures (10th October) he at once began to visit the various institutions of the city, by attending an examination at the Institution for the Blind, then under the care of Dr S. G. Howe. On the following afternoon, Tuesday 9th, he accompanied the Hon. Horace Mann, secretary to the Board of Education for the State of Massachusetts, and the governor, Edward Everett, to a school convention to be held at Taunton, a village 37 miles distant from Boston, on the next day.

"The State lately passed a law for improving their common schools, and this was a meeting held under the Act. A Committee to prepare school-books was appointed by the State, one minister or leading man out of each of nine sects. No book can be adopted unless *all* agree. Eight have sanctioned my 'Constitution' as it stands, but one orthodox minister dissents, and it stands over; but they expect to remove his objections."

Combe was much impressed by the report read to the convention by Mr Mann; it embraced many of the theories of the

"Constitution," and this was acknowledged. Governor Everett, who had travelled much in Europe, advocated those principles of practical education which were of vital importance in Combe's eyes; and the latter wrote, "I do not know that I ever enjoyed any scene so thoroughly as this day's meeting." He had to leave early in order to deliver his first lecture in Boston. The lectures had only been announced by a few lines in the newspapers; and although 2000 prospectuses had been printed, by some mistake only 50 had been distributed. As this was his first public appearance in America, and feeling that his subject was not one to attract numbers without some previous exertion to excite interest, he was disappointed by the little that had been done in this direction, and anxious about the result. Besides, Mr James Silk Buckingham, a traveller, lecturer, and founder of the London *Athenæum*, was delivering a course of popular lectures under the auspices of the Literary Institute. Had Combe been aware of this he would have altered his dates; and subsequently, when Mr Buckingham attempted another series of lectures, which was not so successful as the first, he proposed to Combe that in future they should steer different courses. This plan was accordingly adopted, and throughout their tours they kept each other informed of their prospective arrangements. They met as friends and parted so. Notwithstanding these drawbacks Combe was able to write to the Doctor on the 14th October 1838:—

"I delivered my first lecture in the Masonic Temple, on 10th October, as fixed in Edinburgh. My terms are 20s. 7½d. (5 dollars) for sixteen lectures, 2s. 1½d (½ dollar) for one lecture. I had 104 whole course and 101 single tickets used, add to which 40 persons, editors and their wives, and 10 private friends free, and you have 255 to start with, besides 20 blind pupils whom I invited from the asylum. They tell me that this is more than Spurzheim had to begin with. They are not in the custom of applauding lecturers or public speakers. I had been at a meeting at which I heard the governor speak, and he received no cheer. I received no greeting at entering,

in the course of the lecture, or at the close ; and Cecy was so alarmed lest I should be discomposed that she inquired the cause, and sent Capen to tell me that it was not the custom, which I had discovered by recollecting how the governor was received. But they were as attentive as men could be, and were pleased. . . . . The educated men here really know and appreciate our philosophy highly, and are most anxious for its diffusion. You are widely known, and everybody has read the "Constitution." We are prophets here ; while Dr Channing in Boston is very much what I am in Edinburgh."

He regarded the profound attention which was paid to him by his audience as the greatest compliment they could bestow, and therefore he was not disturbed by the absence of applause. The course consisted of sixteen lectures of two hours each, delivered on three nights a week. But at the end of the first hour of the first lecture he delivered a brief episodical address : he mentioned that—

"Phrenology taught us that the mind thinks by means of the brain, is liable to become fatigued by too long attention, as the locomotive muscles are by too much walking; and I therefore proposed to them to take a brief rest. I requested them to stand up in order to vary their position ; also to converse freely with each other for the sake of relaxation, the more merrily the better, for cheerfulness circulates the blood ; and I called their attention also to the absence of all means of ventilating the hall, remarking that, as we had already breathed the air which it contained for a full hour, it must have lost much of its vital properties and needed to be renewed. I requested the gentlemen to put on their hats, and the ladies their shawls, to avoid catching cold, and then had the windows widely opened. This proceeding caused some astonishment and alarm at first ; for the Americans generally have a dread of cold air, amounting almost to an aërophobia. I assured them that they would suffer no inconvenience, and they submitted to the experiment. The interval allowed was only five minutes, at the end of which I resumed the lecture ; but so refreshing was the effects of the brief rest, of the change of position, and, above all, the admission of pure air, that during the second hour the attention was as completely sustained as during the first. The same practice was continued every evening through the whole course, and with the same success. Many individuals expressed their gratification at having discovered

such simple means of relieving the tedium of a long discourse."

The number of Combe's audience increased as he proceeded; the tickets for the course amounted to 165, and 1240 single tickets were sold, besides over 100 free. Throughout his tour he followed this plan: to let his friends who managed the preliminary arrangements fix the charge for admission to the lectures according to their own knowledge of their respective towns. He desired them to furnish a list of individuals to whom they would recommend free tickets to be given, and to include in the list men of talent who might not be able to afford to pay for the course. To all these, free tickets were presented; but he found himself pestered for free admission by many who were quite able to pay for it. To this class he always answered that if they would bring a letter from some one he knew, stating that they were worthy of a free ticket, he would grant it. He then furnished a list of his acquaintances, but none of the applicants returned, although some of them abused him in anonymous letters.

In Boston he found himself surrounded by the best class of people, from the governor downward. Amongst others whose society he enjoyed were W. H. Prescott, Daniel Webster, George Bancroft, George Ticknor, who was then engaged on his famous "History of Spanish Literature," and during the latter part of his sojourn, Dr W. E. Channing. With Mr Mann he was in frequent communication, and the friendship begun here became an enduring and affectionate one. Mr Mann, a barrister by profession, had served the State in various capacities, notably as a reviser of its law code, and was now working arduously as secretary to the Board of Education. He was enthusiastic in his desire to see the people elevated by means of education, and he found in Combe one as enthusiastic as himself in the cause, as well as an able instructor in the means to the end. Hence they were in entire sympathy with each other's thoughts and aims. "He is a delightful companion and

friend," Combe says, " and among all the excellent men whom we met with at Boston, none entwined themselves more deeply and closely with our affections than Horace Mann."

Of his Boston audience he writes :—

"My eyes never rested on such a collection of excellent brains. Spurzheim's memory is warmly and delightfully cherished by them, and they were prepared for me in every way. The hereditary descent of the moral and intellectual organs has been favoured by their habits and institutions, and they are the big-headed, moral, intellectual, and energetic Pilgrims, enlightened and civilised."

One of his earliest excursions was to the cemetery of Mount Auburn, where Spurzheim was buried; and whilst his thoughts were sad, he experienced feelings of intense pleasure in witnessing the monument which Mr William Sturgis, a wealthy merchant of Boston, had erected to the memory of his friend: it was a sarcophagus of marble resting on a pedestal of granite, and surrounded by an oval iron rail. The inscription was " Spurzheim, 1832," and to Combe there was fame and glory in the simple word. The Boston Phrenological Society had preserved the brain and skull of the head of their science; but owing to various delays Combe failed to see them until the day before he left Boston. His inspection was so hurried, and as he had to examine the brain through the glass in which it was hermetically sealed, he could do no more than distinguish that brain and skull indicated all the characteristics which had been apparent in the living man. The treasures were secured in an iron safe, the key of which was in charge of the chief office-bearer of the society. Dr Jackson, who had attended Spurzheim in his brief illness, was now able to give in conversation much fuller details of its course and causes than had been possible in writing. Combe reflecting on this information wrote in regard to himself :—

" The fate of Dr Spurzheim served as an instructive lesson to myself. I speedily became aquainted by experience with some of the causes which had occasioned his death. From the first day that my arrival in Boston was announced in the news-

papers, I was waited upon at every hour between 8 A.M. and 10 P.M. by a succession of visitors, many of whom called without introductions, and kept me in a state of constant and fatiguing cerebral excitement; and this continued day after day. Many of these visits were most gratifying to me, but some of them were made by individuals impelled chiefly by curiosity, who put a succession of common-place questions, received equally common-place answers, and retired, leaving scarcely an interval between their departure and the renewal of the interrogatories by a succeeding visitor. I seriously thought of getting the questions and answers printed and posted up in some conspicuous part of the room, where they might be read, while I might sit quietly and be looked at. This custom of introducing one's self is peculiar to America, so far as I have learned of the etiquette of other countries, and is meant as a mark of respect. The evil is aggravated by there being no hours of respite from it. If it were confined to the day, between 12 and 6 P.M., the evenings and mornings would be left for repose; but here it never ceased while the novelty and curiosity lasted. A phrenologist is more exposed to this infliction than ordinary strangers. There is so much of the wonderful supposed to be connected with phrenology that my presence excited the men of strange minds, the lovers of the fanciful and extravagant, and sent an undue proportion of them to do me spontaneous honour by an interchange of ideas. Knowing that these visits were kindly meant, I submitted to them in patience, and received the visitors with all the courtesy that I could command; but I soon felt that my organisation could not sustain the excitement which was in preparation for me. I therefore laid down a rule, from which I did not deviate six times during my whole residence in the United States, namely, to give only three lectures a week; never to accept of an invitation for the day on which I lectured; and never to remain in company later than ten o'clock in the evening. By a nearly inflexible adherance to this resolution, and by strict temperance, I withstood all the influences of the climate and the labours of my vocation, without suffering one hour's illness during my stay."

In addition to his regular course of lectures he gave a series of practical lessons in phrenology, first showing how the temperaments were to be distinguished and afterwards the organs and the manner of taking measurements. These lessons took place between 10 A.M. and 1 P.M., and were attended by

both ladies and gentlemen. At first the pupils were inclined to regard the business in hand as an amusement rather than a study; but as the principles of the science were step by step unfolded to them by practical illustration, they became thoughtful, and ultimately seriously interested. Before the lessons were concluded several of the pupils had acquired some skill in manipulation. Combe explained that he did not profess to teach them phrenology in sixteen lectures and a few practical lessons: all that he could do and hoped to do, was to interest them in the subject, and to show them the way to study it. He endeavoured to impress upon all his audiences the fact that a knowledge of the science could only be acquired by long and careful personal observation and study.

The sixteen lectures which formed his regular course contained the substance of the fifty lectures, each of one hour's duration, which he formerly gave in Edinburgh; but here he occupied two hours on each evening. In the first lecture he advanced the phrenological arguments and proofs that the brain is a congeries of organs manifesting different mental faculties. He briefly traced Gall's career and the observations which had led him to associate individual characteristics with particular formations of the head. From this he proceeded to show that in the whole mechanism of the human frame every organ had its distinct function. Some parts *appeared* to perform several functions: thus the tongue moves, feels, and tastes; but analysis showed that each function had its peculiar organ, and the tongue possesses a nerve of motion, a nerve of feeling, and a nerve of taste, and any one of these might be removed without impairing the other two. Again, the different faculties of a child appear at different periods—affection for parents before veneration, the perception of colour and form before the power of reasoning; and the sense of fear manifests itself at the age of two or three months. If the brain were a single organ these powers would be simultaneously developed. He cited the experiments of Foderé, Sir Charles Bell, and others, who did not

favour phrenology, to prove that the brain was a congeries of organs.

In the second lecture he dealt with the size of the brain as, other things being equal, a measure of power. He referred to the works of Sœmmering, Cuvier, Blumenbach, Magendie, Georget, &c., in proof of this theory. He warned his hearers to make a clear distinction between the head with all its organs in a healthy condition, and the head in which one or more of the organs might be diseased; he also desired them to observe that a head might be comparatively small in circumference and yet large in height. Sir Walter Scott's head was of the latter type, and whilst his hat was the smallest in the hatter's shop, his head, from the ear to veneration, was the highest Combe had ever seen. With much satisfaction he was able to quote from the old enemy of phrenology, the *Edinburgh Review*, the following sentence in support of his theory :—

> The brain is observed progressively to be improved in its structure, and, with reference to the spinal marrow and nerves, *augmented in volume*, more and more until we reach the human brain, each addition being marked by some addition to, or amplification of, the powers of the animal—until in man we behold it possessing some parts of which animals are destitute, and wanting none which they possess." *

He then directed attention to the circumstances which tended to modify the effects of size, the most important of which was the constitution of the brain. This constitution was ascertained by what are called the temperaments, namely : 1, the lymphatic ; 2, the sanguine ; 3, the bilious ; and 4, the nervous. He explained the outward manifestations of these temperaments and the results of their combinations ; and desired his audience to remember that a large brain might be less active than a smaller one if its temperament were inferior. He next reviewed the means by which the inquirers who had preceded,

* *Edinburgh Review*, vol. 47, on Sir Charles Bell's "System of the Nerves," written by Dr Conolly.

Gall had endeavoured to ascertain the philosophy of mind and functions of the brain. By one party of philosophers—Locke, Hume, Reid, Stewart, &c.—the philosophy had been evolved out of their own consciousness, but consciousness does not inform us that the mind manifests itself by means of organs at all, and the connection between brain and mind was not revealed by these thinkers. Again, the anatomists cut up the brain in every direction ; but dissection never could disclose the functions of any part. He condemned, as useless and cruel, the experiments on the brain and nerves of living animals with as much vigour as the most ardent anti-vivisectionist of our own day.

In the third lecture he endeavoured to show how we might successfully investigate the mental powers by means of organisation. It was first necessary to discover the mental qualities of individuals from their actions ; and next to ascertain the size of the brain during life. Although actions were often the result of complex motives, there were certain broad lines of character which were easily discernible ; thus we find one person covetous, another vain, and another benevolent. We know that these dispositions are natural and permanent : we never expect the man who is proud and boastful to-day to be simple and humble to morrow, or the covetous one to be transformed into a model of benevolence. He therefore thought it was clear that mental qualities could be discovered in the actions of individuals. His next step was to explain the structure of the brain and the method of dissection adopted by Dr Spurzheim, which most clearly revealed the convolutions and traced the fibres to their sources. The skull of the child increased as the brain became enlarged, and its form was affected in the growth. He now proceeded to describe particular organs, making the usual phrenological division of the faculties into Feelings and Intellect, and of the Feelings into Propensities and Sentiments. Taking the Propensities first, he concluded this lecture with an account of the situation and functions of Amativeness.

The fourth lecture embraced the organs of Philoprogenitiveness, Concentrativeness, Adhesiveness, and Combativeness; the fifth lecture—Destructiveness, Alimentiveness, Love of Life, Secretiveness, and Acquisitiveness; the sixth—Constructiveness, and, entering on the Sentiments, Self-esteem, Love of Approbation, and Cautiousness. The seventh lecture was occupied with the Superior Sentiments—Benevolence, Veneration, Firmness, and Conscientousness; the eighth—Hope, Wonder, Ideality, Wit, and Imitation. In the ninth lecture he began to explain the nature of the Intellectual Faculties; Individuality, Form, Size, Weight, and Colouring; in the tenth—Locality, Number, Order, Eventuality, Time, and Tune: in the eleventh—Language, Comparison, and Causality. In concluding this lecture he referred to the cry of materialism which had been raised against phrenology, and which had frightened many people who would otherwise have studied the new science. He confessed that he was unable to discover of what essence mind was composed; but he knew that there was no manifestation of mind without brains. The Creator alone could reveal with what powers He had endowed matter, and he was content to accept the revelation of His laws as manifested in His works, and to trust the rest to His wisdom and benevolence.

"The true way of discovering for what end man has been created," Combe said, "is to look to the qualities with which he has been endowed, trusting that the substance of which he is composed will be found perfectly suited to the objects of his creation. When we inquire into his qualities we find the thinking principle in him to differ not only in *degree*, but in kind, from that of the lower animals. The latter have no faculty of justice to indicate to them that the unrestrained manifestation of Destructiveness or Acquisitiveness is wrong; they have no sentiments of Wonder and Veneration to prompt them to seek a God whom they may adore; they have no faculty of Hope, pointing out futurity as an object of ceaseless contemplation, and leading them to expect a life beyond the grave; and indeed, several of the convolutions of the brain, which in man form the organs of the Sentiments, appear not to

exist in the lower animals. The organs also, which in man serve to manifest the faculties of Reflection, are in the lower animals eminently deficient; and their understanding, in exact correspondence with this fact, is so limited as to be satisfied with little knowledge, and to be insensible to the comprehensive design and glories of creation. Man, then, being endowed with qualities which are denied to the lower creatures, we are entitled by a legitimate exercise of *Reflection* (the subject being beyond the region of the external senses) to conclude that he is designed for another and a higher destiny than is to be allotted to them, whatever be the *essence* of his mind."

Combe's doctrine in regard to materialism was simply: That we know nothing of the ultimate cause of thought and feeling; but that the manifestations of the mental powers and dispositions in this life are affected by the state of the organs. The solution of the question between mind and matter he regarded as not only impossible but unimportant; for "the dignity and future destiny of man as an immortal being does not depend, of necessity, on the substance of which he is made."

The twelfth lecture dealt with the modes of activity of the faculties—that is, the manner in which each faculty was excited, as Benevolence by a scene of distress, Cautiousness by any source of fear, and so with the others. The thirteenth lecture considered the varieties of dispositions and talents; thus, Individuality, Eventuality, and Comparison indicated a talent for observation and practical business. The combination of Individuality, Form, Size, and Locality were the faculties which should be found in a surveyor; add to these Weight and Order, and the faculties were those which should give prominence in engineering enterprises. All these organs were found prominent in the head of Robert Stevenson. In this manner he described the combinations of faculties in the heads of Canova, Haydon, Wilkie, Curran, Pitt, Franklin, Parry, Burke, Sheridan, and Burns. He followed this with comments on national skulls and the characteristics which they indicated; and concluded with his discourse on "Human Responsibility." Regarding this portion of his lectures he writes:—

"I have now delivered my lecture on human responsibility as affected by phrenology, and it has been well received. In my public discourse I limited the discussion to the question of the responsibility of offenders to the civil magistrate, but some of my hearers have conversed with me regarding its relation to the prevailing interpretations of Scripture. The view stated to my class was briefly this: Men may be divided into three great classes. The first comprehends those in whom the moral and intellectual organs are large, and the organs of the propensities proportionately moderate in size. This class possesses the highest qualities of sentiment and intellect in ample proportion: they have received the power to know what is right, and to do it; and they are justly liable to be punished by the law if they do what it proclaims to be wrong. The second class includes those individuals in whom the organs of the animal propensities, moral sentiments, and intellectual faculties are nearly balanced, being all large. Such persons experience strong impulses both to good and evil, and their actual conduct is greatly influenced by the circumstances in which they are placed. If uneducated, and exposed to want and vicious society, they may lapse into crime: if well-educated, trained to industry, and favoured with the society of the intelligent and good, their higher powers may acquire and retain the ascendency during life, and they may avoid all serious offences. These men are liable to be influenced by the fear of punishment, and are therefore responsible; but they should be treated with a due reference to their natures; corrected and improved, and not merely tormented. The third class comprehends those in whom the organs of the propensities are large, and the organs of the moral and intellectual faculties very deficient. I stated it to be my conviction, founded on observation, that such individuals are incapable of resisting the temptations to crime presented by ordinary society, that they are moral patients, and should not be punished, but restrained, and employed in useful labour during life, with as much liberty as they can enjoy without abusing it. I mentioned, that, according to my view, a severe responsibility lies on the first class, for on them a bountiful Creator has bestowed his best gifts, and committed their weaker brethren to their care; that hitherto, in most countries, they had thought merely of punishing these feebler minds, and that it would be a just retribution to administer to them, for their harsh and unjust conduct, no small portion of the sufferings which they have inflicted on those whom they should rather have instructed and protected."

The subject of the fourteenth lecture was physical education, in which he urged upon his audience the necessity of fresh air, muscular exercise, and rest, to produce proper digestion and a healthy condition of the body. He explained the conditions under which the stomach and the nervous system would act efficiently, and drew attention to the many ways in which these conditions were disregarded—by men, in the over-excitement of business competition; by women, in tight-lacing and neglect of exercise. The fifteenth lecture was on mental education, which embodied Combe's views on the importance of conveying to the child ideas by means of practical illustrations of the words which represent them, and on the necessity of teaching anatomy and physiology as early as possible, so that the laws of health might be understood and obeyed. He did not mean that the minute details of these sciences should be taught; but that the structure of the leading organs of the body should be explained so far as to render their functions intelligible; and that on this knowledge should be founded a clear and practical elucidation of the laws of health. He was satisfied from observation that this instruction might be successfully communicated to children of ten years of age and upward. "The structure addresses their observing faculties, and an explanation of the functions is as interesting to them as a romantic story."

The sixteenth lecture was on "The Application of Phrenology to the Present and Prospective Condition of the United States but as this formed the basis of his farewell address to the people of America, it will be referred to on a future page.* In

* At the close of the last lecture, the following complimentary resolutions were adopted by the class, and presented by a committee:—

"At a meeting of the subscribers to the course of lectures delivered by George Combe, Esq., in Boston, held at the Masonic Temple, Nov. 14, 1838, Resolved—That this audience feel highly grateful to George Combe, Esq., for the generous philanthropy which has led him from the shores of his native country, to extend among us the principles of that philosophy which he has cultivated with so much success.

"Resolved—That we have derived from the lectures of Mr Combe much

addition to his lectures and practical lessons he delivered an address to the Franklin Society on "The Connection between the Body and the Mind," when about 600 of the working-classes were present.

In accordance with a resolution passed by the members of Combe's class, he and Mrs Combe were invited to dinner at the Tremont Hotel on the 15th November—the evening previous to his departure. About 100 ladies and gentlemen were present, and in their name Dr S. G. Howe presented to him a silver tea-urn with the inscription: "To George Combe, from his friends in Boston, Massachusetts, 1838." He was deeply gratified by this token of esteem, and the whole of his experiences in Boston had been so pleasant that he took a most hopeful view of the future of the country.

"It appears to me," he wrote, "that New England is destined to be the fountain whence morals, education, and civilisation shall flow to animate and refine the great plains of

instruction and delight, and we believe that his investigations have shed a valuable light on the physical, intellectual, and moral constitution of man; and that his labours are eminently calculated to promote the progress of the human race in civilization, virtue, and religion.

"Resolved—That these resolutions be signed by the Chairman and Secretary, and that the following persons, namely, John Pickering, Charles G. Loring, John Pierpont, Horace Mann, and George Barracott, be a committee to present these resolutions to Mr Combe. Abbot Laurence, Chairman."

The following letter was also presented:—"To George Combe, Esq., Boston, Nov. 13th 1838. A large number of our citizens having expressed a desire of giving you some public testimonial of their personal regard, and of their respect to you as a teacher of mental and moral philosophy, a meeting was held for that purpose on Friday last.

"The undersigned were appointed a committee to carry into effect the wishes of the meeting, and as the result of their deliberations, they beg to ask your acceptance of a piece of plate, as a testimonial of the affection and respect of your friends in Bostan.

"They are desirous that the presentation should be accompanied by some ceremony, and they propose that it shall be followed by a social entertainment, in order that ladies, as well as gentlemen, may have an opportunity of paying their respects to Mrs Combe as well as to yourself.

"Will you have the goodness to name some evening, when it will be convenient for you to attend the presentation. With much respect, we are, dear sir, yours most truly, Jno. Pickering, Charles T. Loring, S. G. Howe, S. E. Sewall, Nahum Capen."

the West, and that all phrenological seed sown here will take root, prosper, and produce one hundredfold."

It had been suggested to him that he should give a second course of lectures in Boston, and he left the city with a strong desire to return to it, should circumstances permit; and in that event he intended to lecture in several of the minor towns of Massachusetts. For, he said, "I shall rejoice to sow seeds which Mr Mann may ripen into a lovely and abundant harvest of morality and intelligence." On Friday 16th November, he started with Mrs Combe for New York, where they arrived early on the following morning. From the Carlton House Hotel he wrote to Dr Combe, 25th November, giving reminiscences of Boston and a sketch of Dr Channing:—

"I could fill many sheets with an exposition of the advantages of a commonwealth, when the people are moral and enlightened. The State in Massachusetts raises a tax for common schools, and appoints commissioners with a secretary—the Hon. Horace Mann, whose head is like your own, and who is full of our philosophy—to administer the funds. They have three houses of reformation for juvenile and adult offenders, besides a state prison, all admirably managed, and the law gives the judges power to send all young persons under twenty-one who cannot show decent means of living, to those institutions. They are managed by citizens, and publicity prevents abuse. The judge of the municipal court (Thacher) attended my lectures. He is above sixty, and has a fine head. He told me that he concurred in my views as to the treatment of criminals, and that the institutions for reformation had been a great comfort to his mind. A criminal had come to thank him for sending him for two years to the House of Reformation instead of one, and said that he felt reformed by the second years' discipline, while the first scarcely subdued his vicious tendencies.

"There are two public lunatic asylums established by the State, one at Charlestown, a suburb of Boston, and one at Worcester, a thriving little town 37 miles from it. The latter is admirably situated, and well managed. It owes its existence to Horace Mann. He was two years president of the Senate, and laboured till he accomplished this good work.

"I read a charge delivered on September 1838 by Judge Parker, to the Grand Jury for the State of New Hampshire, on

the subject of insanity, in which all our views are embodied. Dr Ray has published a volume on the "Medical Jurisprudence of Insanity," which he quotes largely, and altogether the charge should make our judges blush.

"I went to a different church every Sunday at Boston, and found the fitting up of the churches and the style of preaching in all of them superior to ours. The pews are large, have carpets and cushions, and the churches are more finished in the interior. The music is admirable, the service short, one hour and a quarter each meeting, but the sermon is a finished composition. The churches are very numerous and well attended, some of the clergy would like a State provision and find the people fickle. There is a general complaint that there are too many churches. The people quarrel and split, and build new churches which they cannot support. Dr Channing told me, that at Newport 1800 souls, of all ages, have four churches, and maintain three ministers. The people have their ministers for five or seven years, and often change. Dr Channing does not see very clearly what will be the end of the present state of things, and says that evangelism is rather gaining ground in New England, because the Unitarians cannot rouse so many of the feelings as their opponents.

"Dr Channing came to Boston only ten days before we left. It is his head which I send to Robert Cox.* He is a small

* *Development of Dr W. E. Channing.*

Age between 50 and 60. Educated. Temperament nervous, and a little bilious. Propensities literary.

*Measurements.*

From ear to spine, $4\frac{1}{8}$.
Ear to Individuality, $4\frac{6}{8}$.
Individuality to spine, $7\frac{3}{8}$.
Ear to Firmness, $5\frac{6}{8}$.
Destructiveness to Destructiveness, 6.
Secretiveness to Secretiveness, $6\frac{1}{8}$.
Cautiousness to Cautiousness, $5\frac{6}{8}$.
Ideality to Ideality, $5\frac{4}{8}$.
Constructiveness to Constructiveness, $4\frac{7}{8}$.
Anterior lobe, large.
Moral region, very large.
Basilar, rather large.

Amativeness, full.
Philoprogenitiveness, large.
Concentrativeness, full.
Inhabitiveness, large.
Adhesiveness, large.
Combativeness, large.
Destructiveness, large.
Alimentiveness, full.
Secretiveness, large.
Acquisitiveness, full.
Constructiveness, full.
Self-Esteem, rather large.
Love of Approbation, very large.
Cautiousness, large.
Benevolence, very large.
Veneration, rather large.
Firmness, large.
Conscientiousness, very large.
Hope, full.
Wonder, large.

fragile man of fifty-eight, with a moderate sized brain, but fine development of the moral organs and good intellect and a high nervous temperament. He has a large Cautiousness, Secretiveness, and Love of Approbation; his manner is shy; he asks questions, and only by degrees begins to communicate his own ideas. With me he was from the first frank and pleasing, at least as much so as his nature would permit. His brain is not large enough to give him the conviction of his really being a great man, and secondly, his want of a philosophy of nature does not enable him to see with full perception the certain truth of his own principles. What Laurence MacDonald said of me is still more applicable to him, his intellect is inspired by his moral sentiments. He is a great thinker, because the moral sentiments are the fountains of truth, and he follows them. He has *faith*, but he appears to me to want that strong intellectual conviction which the new philosophy gives to us. He has a sweet expression about the mouth, and is a delightful companion, my only regret being that I saw so little of him. He must have made a great moral effort in declaring himself against slavery and Texas, because he has offended many, and his combination of organs makes him feel public sentiment strongly. I heard him depreciated for these efforts by one individual, who tried to persuade me that he had lost his influence in consequence. I told his detractor roundly, that if what he said was true, Boston, and not Channing, was disgraced.

"As an example of the influence of the moral sentiments in Massachusetts, I may mention that the Legislature lately passed a law prohibiting the sale of spirituous liquors in smaller quantities than 15 gallons. The opponents of temperance have tried at this election to return a majority to repeal this law. The parties are so divided into Van Buren's men, Temperance men, and Anti-Licence law men, that the elections have to a great extent failed. An actual majority of the *whole* voters must be in favour of a candidate before he can be returned, and few had this majority. A new election takes place, until men are found who are supported by a majority. When would our parties break into sections about a moral question of this nature?

"It is certain that house-keeping is rendered burdensome by the difficulty of finding good servants. The American common people are too well off to submit to domestic service, and the Irish and negroes are an inferior substitute. If education proceed, Owen's system will be forced on men by necessity. We found rich people living in hotels, because the wives were

delicate and not able to undergo the fatigues and anxieties of house-keeping.

"The great feature of this country is its newness. Boston is very like an English town, but even in it the streets are ill paved and lighted, and many things indicate an unfurnished state of things. Every man builds his house according to his fancy, and numbers it also as he pleases. The confusion in the numbers of the houses, from alterations and the absence of all authority to compel uniformity, is indescribable. Two facts seem to me to be the key to all that one sees of a peculiar nature. Interest is 6, 7, and 8 per cent., and unskilled labour costs 4s. 2d., a day. In everything, therefore, as little labour and capital are expended as possible. Houses are built without presses, &c.; roads are formed but not made with stones; everything is rough, and just sufficient to be doing with. The farther west you go, interest is higher, capital scarcer, and labour dearer, and of course everything is ruder: it is this great want of capital that causes such swarms of banks to spring up. At one of my lectures, the notes of twenty banks are generally taken, and a local man of intelligence is indispensible to protect one from frauds. I employ the door-keepers of the institutions to sell tickets, and my own man (for I have hired James Hunter, from Fife, at 4s. 2d. a day) to draw the tickets at the door. We have both kept our health extremely well. I drink scarcely any wine, and sleep very soundly. I have incessant mental excitement, but it agrees well with me so long as my mind is at ease. Cecy is cheerful and happy, and a great comfort to me."

The first course of lectures in New York was commenced on the evening of the 19th November, and concluded on 24th December. They were the same as those delivered in Boston; and at the close a committee of the class, comprising members of the Legislature, judges, lawyers, and medical men, presented him with an address expressive of their high appreciation of the services he was rendering towards the advancement of education, the improvement of the institutions of government and society, and the elevation of the human race. The average audience throughout the course numbered 362 persons. His practical lessons, given in the forenoons, and occupying on each day from two to three hours, were attended by upwards of 200 ladies and gentlemen. His first lecture to the Mercantile

Literary Association was attended by nearly 1000 people, and during the remaining three lectures the room was almost as densely crowded as at the first. His subjects were: 1, the Physical Structure of Man; 2, on Physical Education, in which he gave the views contained in Dr A. Combe's books on digestion and physiology, and in his own "Constitution of Man;" 3, on the Mental Constitution of Man; and 4, on Mental Education. In the presence of a number of medical practitioners and others he dissected a brain in accordance with the system of Gall and Spurzheim, revealing the converging fibres and Solly's superior longitudinal commissure, which last was new to all his visitors. In thus showing them the new anatomy of the brain he had responded to the earnest request of several surgeons and physicians, who had frankly confessed that they did not understand the new mode, and were anxious to be instructed. All professed themselves gratified by what they had witnessed: and as a mark of their esteem desired that he should sit for his portrait. This, however, did not save him from some sneering remarks by an ignorant journalist at the presumption of the stranger who had come to teach anatomy to the professional men of America. Combe did not receive these remarks with the philosophical calmness with which he had met much more serious attacks, and took unnecessary pains to explain that he did not pretend to teach the medical men of America, but only attempted to display to them a mode of dissection which all, except Dr Bell of Philadelphia, admitted was unknown to them before.

The cause of this unusual anxiety or irritability was plain enough to those who were intimate with him: he was in fact proving in his own person the truth of his own philosophy. He was overtaxing his strength in his eagerness to accomplish the work he had in hand. He scarcely allowed himself a day's rest between his lectures at Boston and the commencement of the course at New York, and every day he was engaged in the inspection of asylums, prisons, reformatories, or schools, besides

the numerous social visits he had to make and the visitors he had to receive. Mrs Combe told the doctor that he was looking "pale and tired," and wished that the excursion were over, although she felt bound to submit to her husband's sense of duty, and rather to try to cheer him in the effort he was making than to damp his spirit by any murmurings on her own part.

On proceeding to Philadelphia (January 1839), however, Combe regained strength; and here he had the largest average number of hearers that he had yet had in the United States: in Boston it had been 303; in New York 365; and in Philadelphia 520. At the close of the course the resolutions passed by the class were so earnest in requesting the repetition of the lectures that Combe agreed to begin again on the 2d March. This allowed him a respite of about a fortnight. But instead of taking rest, he gave practical lessons in phrenology, dissected the brain before the principal medical men of the city, and visited the institutions of the place, making careful notes of all his observations of character, law, custom, and civilization.

Amongst the first of the celebrities to whom he was introduced in Philadelphia was Joseph Buonaparte, whom he met at a dinner of the American Philosophical Society which had been founded by Franklin.

"I was introduced to the members before dinner, and to the Count de Survilliers, who appeared to me when seen in the drawing-room a short, muscular, amiable country gentleman. He speaks little English and pronounces it badly. He sat directly opposite to me during dinner, and appeared simple, kind, and amiable. His head is large; his anterior lobe average; and his coronal region large. Cautiousness is largely developed. His temperament is sanguine-lymphatic. On examination, the features, particularly the nose, mouth, and chin, were evidently those of the family of Napoleon; and when he smiled, and also when he spoke earnestly and gravely, the expression of the mouth was exceedingly like that which appears in the best pictures of Napoleon. His health was given, and the concluding words were: "The toast is Joseph Buonaparte, once a king, still a sovereign, and always a philosopher." Mention was made of his literary and philosophical

tastes, of his refined hospitality, and of the esteem which he had acquired from all the people who knew his virtues. He replied in a short, elegant, and appropriate speech in French, the import of which was that he had seen many countries and their inhabitants, but he had never known any so happy, so prosperous, and so worthy of his esteem as the people of the United States. He had known them for 25 years, and if they proceeded in future as they had done in that period, they would be the greatest and the happiest nation on the globe."

During the interval between the close of his first course of lectures and the beginning of the second, Combe made an excursion to Baltimore, where the slave question was brought more prominently under his notice than at any place in which he had yet sojourned, although it had been frequently discussed in his presence; and he had no language strong enough to express his abhorrence of the existing state of matters.

"I know that slavery was instituted here by the British," he writes; "that the infant colonies passed laws abolishing it, which were annulled by the king in council; that abolition is attended with very great difficulties; and that the slaveholders are personally the victims rather than the authors of the system. But all these considerations cannot make wrong right. They cannot make benevolence and justice approve of the scenes indicated by these advertisements.* Every apology may be framed, therefore, for slavery which the ingenuity of angel, man, and devil can invent, but the discord between it and the dictates of man's highest and noblest faculties ever jars upon the soul, and ever will jar, until it be abolished. Those who apologise for it, without proposing any measures for its ultimate termination, do not see this great fact—that this discord exists, will exist, and will never allow peace to the highest class of minds until such outrages to humanity shall cease to pollute the earth. They do not perceive that a just God governs the world, and that the dictates of these sentiments are His voice thundering against slavery. They speak of slavery as an institution permitted by His providence, and say that in His own good time He will bring it to an end. They may as well say that piracy, murder, and fire-raising, are institutions of His providence. They and slavery proceed from abuses of man's animal propensities, and God has given man the power of

* Advertisements in the newspapers of the sale of negroes, in the same manner as we advertise the sale of cattle.

abusing all his faculties; but He never approves of these abuses: through the dictates of the higher sentiments He denounces them as disgraceful iniquities. In His government of the world He takes care that those who sow the wind shall reap the whirlwind; and so will it be with the slaveholders, if they leave it to God's providence to put an end to the institution without making any moral effort themselves to abolish it. He will abolish it; but it will be in tempest and storm, in blood and devastation, in cries and misery. He now calls on *them* to abolish it in mercy and peace."

He did not live to see the terrible fulfilment of his prophecy in the civil war of 1861–64. Slavery was so repugnant to his feelings that he boldly condemned it whenever the subject was mentioned in society, and he had frequently to encounter the indignant retorts of men who either could not or would not see anything wrong in the system. He felt so strongly on the subject that he meditated introducing it into one of his lectures; but on every hand his friends advised him not to mar the effect of his instruction by publicly taking a side in the question which more than any other agitated the country.

From Baltimore he proceeded to Washington. Dr Thomas Sewall, professor of anatomy in the Columbian College, who had delivered and published two lectures against phrenology, received the apostle of the science with much kindness. Each frankly stated his views to the other, but their antagonism on this subject did not interfere with friendly intercourse. Dr Sewall took him to the "White House," and introduced him to the President, Van Buren. The latter is described by Combe as follows:—

"He is very like the busts and portraits of him—short, sanguine, and nervous, with a large head in proportion to his person; large anterior lobe; large Benevolence, Veneration, and Firmness; moderate Conscientiousness; large Secretiveness, Self-esteem, and Love of Approbation. His head is bald, all except the sides. His manners are very agreeable, combining the ease of a gentleman accustomed to the best society with the dignity of a public character."

At Dr Sewall's house he met, amongst many senators, ex-president John Quincy Adams, of whom he writes:—

"Mr Adams, after having been president of the United States, now sits in the House of Representatives as one of the members for Massachusetts, a position which appears to me to be in every respect consistent with republican principles, and perfectly compatible with the dignity of his previous office. A real patriot is ready to serve his country in any station in which his talents may be useful, and there is true magnanimity in descending at his country's call from the station of supreme power to that of an ordinary representative; and still more so, as at present he is the only president who has not been re-elected for a second term.

"Numerous busts of him are published, but I doubted their accuracy, for I was disappointed in the development of his head; but I now see that they are correct. He is stoutly made, and his temperament is sanguine-nervous-bilious, giving him great activity, and power of enduring fatigue. His brain is large; the base of it is large; Acquisitiveness and Benevolence large; Veneration and Conscientiousness full. The anterior lobe is of considerable size, although not large in proportion to the regions of the propensities and sentiments. This indicates a man of impulse rather than of clear, sound, and consistent judgment. His organs of the observing faculties, however, particularly those of Individuality, are well developed, but they are larger than those of reflection, giving rise to talents for observation, for accumulating knowledge, and for producing it when required; but without a corresponding power of penetrating to the principles of things, and tracing consistently distant consequences. With much kindness of disposition and stubborn independence of character, the head indicates a liability to heat of temper, and to occasional obstinacy; also, a deficiency in tact, and a difficulty in preserving a continued consistency; the latter imperfection arising not from any tendency to wavering in his disposition, but from a limited intellectual capacity to perceive fine and distant relations, combined with a self-confidence which will rarely allow him to doubt the soundness of his own inductions. Most of the presidents of the United States are said to have injured their private fortunes by the expenses of office except Mr John Quincy Adams. He is spoken of as an economist, who spent what the Government allowed him but no more. The small pay allowed to American functionaries is attended with some evils. Only men of large fortune, of whom there are not yet a great number in the

United States, or men in whom ambition is more powerful than prudence, are likely to become candidates for public offices. The latter are the very men whom the people should avoid as public servants; for a democracy, above all other governments, needs men of prudence and of incorruptible integrity to conduct its affairs. A system of government which has the natural tendency to promote imprudent and ambitious men to power, may be designated as a hot-bed to generate jobbers and peculators. I hear it stated, also, that the foreign ministers of the United States are often ruined by the extra expense entailed on them by their office. The pay of ministers plenipotentiary is $9000 per annum as salary, besides $9000 for outfit. *Chargés d'affaires* receive $4500 per annum, and secretaries of legation $2000. I am told that some of the members of the House of Assembly contrive to save $400 or $500 out of their own pay during the session in Washington, and would regard any man as an extravagant waster of the public money who should propose an increase of salaries."

Combe returned to Philadelphia in order to prepare for his second course of lectures; it was the first time he had ever ventured to repeat a course immediately after the conclusion of the first; and Dr Spurzheim had warned him that such a proceeding never succeeded. However, he engaged the Music Fund Hall at an expense of $50 for each night, and had an average attendance of 357, which he considered a large second class. At the conclusion, his class again presented him with a number of resolutions expressive of their sense of the value of his labours, and stating that it would be highly acceptable to the community if he could make it consistent with other arrangements to deliver another course during the next winter. Four of the seven gentlemen who presented this testimonial were medical men, and amongst them Dr Samuel George Morton, author of the "Crania Americana." In this book Dr Morton gave the result of many years' investigation into the forms of the skulls of various aboriginal nations of North and South America; at his request Combe examined the crania and wrote an article on their phrenological characteristics, which was included in the work. On the 26th and 27th February

and 4th March, he delivered his three lectures on education at Wilmington, Delaware.

During his second course of lectures in Philadelphia occurred an incident characteristic of the time and the people ; it also shows the straightforward manner in which Combe dealt with affectation of any kind :—

"In my first lectures in Philadelphia I endeavoured to point out the connection between beauty—in the proportions and forms of the human figure—and health. The handsomest figure is one in which the abdomen, the chest, and the head are all well developed, and this proportion is also most favourable to health ; because on the first depends digestion, on the second respiration, and on the third mental energy. The limbs will rarely be found deficient where the proportions of these regions are favourable. I recommended to my audience the study of the human figure in statuary and painting, not only as an interesting object of taste, but as capable of conveying knowledge of great practical utility. A mother with an eye familiar with those proportions, and instructed in their relation to health, would watch with increased attention the habits, postures, and nutrition of her children. If she saw the abdomen tending to become tumescent, the chest flat, and the head enlarged, she would early become aware that there was some deviation from the laws of health ; and thus by timely remedies might prevent serious disease. There is no inherent indelicacy in the human figure. It is the workmanship of the Creator, the temple of the mind, and there is impressed on it a beauty of form and an elegance of proportion that render it capable of exciting the most pure and refined impressions in a cultivated and virtuous mind. Where indelicacy is felt its source must be looked for, not in the object, but in licentious feelings, or in a perverted or neglected education in the spectator. That individual who is able to associate only impure ideas with the most exquisite specimens of the fine arts resembles a man in whom the aspects of a rich and beautiful woman should excite only feelings of envy, cupidity, and discontent.

"These views appeared to me to be well received ; and some friends even commended them as useful in tending to correct that false delicacy which injures the health and usefulness of many American women.

"In the *United States Gazette*, however (a Philadelphia paper), of the 28th of March, a letter subscribed 'Candidus' appeared, which, in allusion to my lecture on this subject in

the last course, characterised it as having been 'equally revolting to the feelings of delicacy of many of the audience, as it was offensive *to the national sense of propriety;*' and the writer hoped 'either that, notice being given of its being obnoxious, it will not again be introduced; or, if it be, that it will meet with a prompt and stern rebuke, which will prevent a repetition.'

"On the present occasion I intentionally reserved this topic for the last portion of my lecture on physical education. I then read the letter to my audience, and announced that I intended to repeat the remarks, and that they would form the conclusion of the lecture; but that before proceeding, I should pause to allow any lady or gentleman to retire, whose delicacy might be offended by them. Ladies composed more than one-third of the audience, and many of them belonged to the Society of Friends. Not a single individual rose. I then stated, in answer to the remarks of 'Candidus,' thus: 'I did not respect any feeling merely because it was "national." It had been a national feeling in Scotland to hate the English; in Britain to hate the French; and in the year 1776 it was the quintessence of patriotism in England to hate you, the Americans; yet every one acknowledges that these were improper feelings in themselves, and that the fact of their being "national" did not alter their character. "Candidus," however, very properly asserts that, in the present instance, the national feeling is founded alike on virtue and reason, and, if so, it merits respect; but this is the point on which I differ from him in opinion. It has been announced by the highest authority that "To the pure all things are pure;" but according to "Candidus," there is one exception, and the verse should have contained the qualifying words, "except the human figure." Has the Creator framed any object that is essentially and necessarily indelicate? Impossible! But my leading design in this exposition is not to initiate you into a love of the fine arts, but to call your attention to the necessity of becoming acquainted with the structure of the human body, and the functions of its organs, as the very basis of a rational view of physical education; and in your country this is an important desideratum. You cannot know that structure without studying it; and you cannot study it without looking on it. If you neglect the study, you suffer; do you believe, then, that the Creator has rendered it necessary for you to study his works, and at the same time made it sinful in you to do so?' Pointing to an anatomical drawing showing the intestines, the stomach, the liver, and the lungs, I said that 'I had been

assured that in whichever of these organs a lady felt indisposed, she told her physician that she had a pain in her breast, misleading him, so far as she had the power to do so, by an erroneous statement of symptoms, and offering increased obstacles to the successful exertion of his skill for her own welfare. In some instances (as I have been told) this feeling of delicacy renders it extremely difficult for the physician to extract, even by the most pointed questions, real and necessary information from over-sensitive patients. This is false delicacy, and it should be corrected by knowledge. Fortified by these considerations, and also encouraged by the right spirit in which the ladies of Boston, New York, and this city have received my remarks on the subject in my previous courses, it is my intention again to introduce it to your notice, and I hope to convince you, by your own experience, that it is quite possible to convey valuable information concerning it without one indelicate emotion or idea being suggested to the mind.' The audience repeatedly applauded these remarks as they were delivered, and testified their satisfaction by a loud and general burst of approbation at the close."

One of the tokens of esteem which he received in Philadelphia was from a painter—Mr Rembrandt Peale—who requested Combe to give him a few sittings for his portrait. Mr Peale was at that time sixty-one years of age; he was the son of Charles Willson Peale, who had been the first professional portrait painter in America. Father and son had painted General Washington, and whilst Mr R. Peale was engaged on Combe's portrait he entertained him with anecdotes of the first president of the United States. Combe writes :—

"He said that General Washington sat to him three times for his portrait. The hour was seven in the morning. The first morning the State House clock struck the first bell of seven; the door opened, Washington entered with his watch in his hand; he was seated before the clock had done striking the hour. The second morning he was seen walking in the State House yard, beneath the painter's window. The first stroke of seven reached his ear as he was walking from the stair; he wheeled round, walked quickly back, and was in the room before the clock had finished seven, again holding his watch in his hand. On the third morning he entered as the clock began to strike."

Combe, when at Newhaven, met another painter, who had been associated with Washington, and also with Franklin, namely Colonel Trumbull, who had served under the general and afterwards painted the chief scenes of the revolution.

So far Combe's experiences in America had been to a certain extent satisfactory, notwithstanding many inconveniences, from which Mrs Combe chiefly suffered. The medical profession gave sincere attention to his expositions of the functions of the brain, and several physicians and professors of anatomy expressed their admiration of the theories advanced and of the mode of dissecting the brain which he showed them. The best educated people of all sects and professions took every opportunity to show their respect for the author of the "Constitution of Man." But amongst the mass of the people he found that there was only a curiosity about phrenology; they had no real interest in it, and no perception of its bearings upon their daily lives, so that when they had listened to the lectures they were satisfied and passed on to the next "amusement." This fact had been suggested to him by many trifling indications of character, and he found unpleasant proofs of it soon after he left Philadelphia: there he had been most successful and found his largest regular audience; at all the towns which he subsequently visited the classes were one-third and sometimes one-half less in number than had been promised to him. His disappointment in this respect was not singular: Professor Silliman of Yale College informed him, that he had found it necessary to insist upon a guarantee from those who invited him to lecture that he would have an adequate audience. Combe regarded the whole system of lecturing in America as too desultory to attract serious attention to any one subject. The literary institutions of the States provided lectures for the winter months; but every night they presented a new lecturer and a new subject; so that the whole system was rather a mode of excitement than of calm study; and the idea of giving continued attention to one branch of science or philo-

sophy had not yet entered the minds of the people. For his second course in New York, Combe was assured of 300 subscribers; but the actual number proved to be 125, which with casual visitors and the free tickets amounted to a class of about 200. However, those who had persuaded him to repeat his course, and the class as a whole, displayed so much appreciation of his labour that he was amply compensated for the comparatively small numbers. An address expressive of admiration for himself and confidence in the beneficent tendency of his philosophy was presented to him at the close of the lectures; and one of the last honours paid to him in the United States was the presentation by this class, on 23d March 1840, of a silver vase bearing medallic portraits of Gall, Spurzheim, and himself, and also of Dr Benjamin Rush and Dr Charles Caldwell.* It was during his sojourn in New York in 1839

* The following gentlemen formed the committee appointed by the subscribers to present the vase: E. P. Hurlbut (author of "Civil Office and Political Ethics"), Rev. T. J. Sawyer, Dr Foster, Dr Boardman, S. W. Dewey, and E. C. Benedict. Mr Hurlbut, as chairman of the committee, amongst other complimentary observations said: "Your visit has awakened the interest of thousands in your welfare—of thousands who are not wanting in gratitude for the instruction and delight which your discourses have afforded them—but who have had no opportunity to manifest, as we do on this most favoured occasion, their high appreciation of your character and attainments, and the enduring impression which your visit has made upon their minds. Their and our best wishes attend you."

In reply Combe said:—"I accept your handsome and generous gift, with the highest gratification. As a mere physical object its merits have been appreciated in this city; it has gained the gold medal offered for the encouragement of art, and it will successfully sustain the strictest scrutiny of the distinguished artisans of the country to which I am about to carry it. But it is as a moral monument of your favourable estimation of my labours among you, and of the interest which you have taken in the science of mind, that it possesses to me an inestimable value. To Dr Gall alone belongs the glory of having discovered the functions of the brain. Dr Spurzheim generously devoted his whole life to the extension, improvement, and diffusion of this splendid product of Gall's originality and genius; and it is difficult to do justice to the noble sacrifice which he made to the cause of truth. When Dr Spurzheim became the disciple of Gall, no human being defended phrenology except its author; and he not only stood alone, but encountered the hostility of civilized Europe, from the emperor to the peasant, a few high-minded individuals only excepted, who were silenced by the hand of power if they rose superior to the influence of scorn. It is no slender honour to me that you associate me with such men. Mine has

that he witnessed a phenomenon which strongly corroborated the theory of the organology of the brain. The following is from his American journal:—

"*May* 15, *ther.* 66°.—This day I was introduced to James J. Mapes, Esq., a scientific gentleman, residing in 461 Broadway,

been a flowery path compared with theirs. It is true that, when still a young man, without name, fortune, high associations, or any external advantages to sustain me against public disapprobation, I fearlessly risked every prospect which the future held forth to my ambition, and became the defender of phrenology when it had few other friends in the British Isles. Professional ruin was prophesied as the inevitable consequence of this, as it was then styled, rash and inconsiderate step. But, for the encouragement of the young and ardent worshippers of truth, I am enabled to say that these auguries never were realized. Many were the shafts of ridicule that were hurled against me, and bitter the taunts poured forth by a hostile press; but they never penetrated to my soul, disturbed my peace, or impeded my prosperity. I mention this not in the spirit of vain-glory, but to confirm the young in the assurance that the path of truth and independence may be safely trodden even against a world in arms, if courage and perseverance be added to prudence in the advance.

"I have sojourned among you now for the greater part of two years, and I am about to leave your country. That I have experienced some inconveniences, and encountered several disagreeable incidents during my stay, is only what belongs to the lot of humanity; but these sink into insignificance when contrasted with the generous cordiality and enlightened sympathy which have been showered upon me by yourselves and your fellow citizens. I have held converse with many enlightened minds in this country,—minds that do honour to human nature; whose philanthrophy embraces not only patriotism, but an all-prevailing interest in the advancement of the human race in knowledge, virtue, religion, and enjoyment in every clime. Many of these admirable men are deeply interested in phrenology. The gifted individual to whom Massachusetts owes an eternal debt of gratitude for his invaluable efforts in improving her educational establishments, has assured me that the new philosophy is a light in his path to which he attaches the highest value. You, Sir, have shown, in a late valuable work, that has issued from your pen, that you are penetrated to the core with this last and best of human sciences; and many who now hear me have expressed similar testimonials to its worth. I return, therefore, highly gratified with much that I have experienced among you, and I shall not need this emblem of your respect to maintain the recollection of such men as I have described, engraven on my affections for ever.

"It is an additional gratification to me to see on this beautiful work of art, the heads of two distinguished Americans, Dr Benjamin Rush and Dr Charles Caldwell. The former has made the nearest approach of any modern author to Dr Gall's discovery, while the latter has manifested great zeal and high talents in its defence. Allow me to add one brief expression of admiration and gratitude to a young countryman of my own, Mr Michael Morrison from Edinburgh, whose exquisite skill chased these admirable ornaments on your gift. Among

New York. His daughter fell from a window when she was about four years of age ; her head struck against the iron bar which extended from the railing to the wall, and the skull was extensively fractured, but without rupturing the pia mater or doing any serious injury to the brain. She was attended by Dr Mott ; a part of the skull was removed from the superior-posterior portion of the head, the integuments were drawn over the wound, and the child recovered. The part of the skull removed was that which covers the organs of Self-esteem and Love of Approbation. She does not wear any plate over the wound, but the hair over it, like that on the other parts of the head, is fine, and is kept short. Immediately after the wound was closed her father was struck with the variety of movements in the brain, and its great mobility during mental excitement, producing, as he said, a sensation in the hand when placed on the integuments, as if one were feeling, through a silk handkerchief, the motions of a confined leech. He felt as

his first efforts in the art was a wax model which he executed of my head in Edinburgh. Several years ago he came to this country, was highly esteemed as a man and an artist, and the embellishment of this vase was almost the last act of his life. Ten days have scarcely elapsed since he was laid in a premature grave. It would have delighted me to have addressed to his living ear the tribute which I now offer to his memory. Again, gentlemen, I assure you of my heartfelt gratitude and lasting respect, and with best wishes for your happiness and prosperity, bid you farewell."

The vase is of exquisite workmanship,—being of Grecian model, with three medallic likenesses on one side—one of Gall, one of Spurzheim, and one of Combe, with the motto "Res non verba quæso ;" and two medallic likenesses on the other—one of Dr Benjamin Rush, and one of Dr Charles Caldwell, with the following inscription :—

"PRESENTED
TO
GEORGE COMBE, OF EDINBURGH,
BY THE CLASS IN ATTENDANCE UPON
HIS LECTURES DELIVERED IN THE
CITY OF NEW YORK
IN 1839, ON THE SUBJECT OF PHRENOLOGY ;
IN TESTIMONY OF THEIR PROFOUND RESPECT FOR THE
DISTINGUISHED LECTURER, AND OF THEIR
BELIEF IN, AND ADMIRATION OF,
THE NOBLE SCIENCE
OF WHICH HE IS THE NOBLEST LIVING
TEACHER AND EXPOUNDER."

Round the base of the vase are chased the heads of several animals as emblematical of comparative phrenology ; and below them are engraved the following words,—"Mr James Thomson, manufacturer of this vase, received a gold medal from the American Institute, for its superior workmanship."

if there was a drawing together, swelling out, and a vermicular kind of motion in the brain ; and this motion was felt in one place and became imperceptible in another, according as different impressions were made on the child's mind ; but not being minutely acquainted with phrenology, he could not describe either the feelings or the precise localities in which the movements occured. He observed also, that when the child's intellectual faculties were exerted, the brain under the wound was drawn inwards. The child was introduced to me ; she is now eight years of age, healthy and intelligent ; and no external trace of the injury is visible to the eye. The form of her head is that of a superior female child : it is long and moderately broad at the base ; Secretiveness, Love of Approbation, Self-esteem, Cautiousness, and Firmness are all large. Benevolence and Veneration are well developed, and the anterior lobe is large. I saw the pieces of the skull which had been removed. They may be $3\frac{1}{2}$ by 3 inches in superficial extent. The skull has not been replaced. On applying my hand I felt the brain rising and falling with the respiration, and distinctly ascertained that the organs of Self-esteem and Love of Approbation were denuded of the skull ; also a small part of Conscientiousness, and the posterior margin of Firmness. Her father mentioned that, before the accident, he considered her rather dull ; but her mother (whom also I had the pleasure of seeing) did not concur in this opinion : both, however, agreed that since her recovery she had been acute, and fully equal to children of her own age in point of ability. With the permission of her father and mother, I kept my hand for some minutes gently pressing on the external integuments over the site of the injury, and distinctly felt a considerable movement, a swelling up and pulsation, in the organs of Self-esteem, and the same movements, but in a less degree, in those of Love of Approbation. When I began to talk to the child, she was shy and bashful, and at first would scarcely speak. The vivid movements in Self-esteem indicated that amidst her extreme bashfulness this organ was active. As I continued to converse with her, and succeeded in putting her at her ease, the movements in Self-esteem decreased, while those in Love of Approbation continued. I spoke to her about her lessons and attainments, not in flattering terms, but with the design of exciting Self-esteem ; and the movements increased. Again I soothed her, and they diminished. This was repeated, and the same results ensued. Her father gave her several questions in mental arithmetic to solve : she was puzzled, and made an intellectual effort, and the peculiar movements in the organs of Self-esteem

and Love of Approbation ceased ; only a gentle and equal pulsation was felt. She solved the question, and we praised her ; the peculiar movements in Self-esteem and Love of Approbation returned and increased. This experiment was repeated at least four times, with the same results. I took out a piece of paper and began to write down notes, in pencil, of what had occurred. She looked at my writing ; and as all attention was now withdrawn from herself, and her mind was occupied intellectually in observing what I was doing, I placed my hand on the integuments, and only the gentle and regular pulsations of the arterial system were perceptible.

"I am much indebted to Mr Mapes, the father of the child, for permitting me not only to see this very interesting case, but to publish his name and residence, so that my remarks may be verified, or corrected if I have erred.

"This case is replete with instruction in practical education. It tends, so far as one example can go, to prove that, by exercising the intellectual faculties, we do not necessarily excite the feelings ; and also that each feeling must be addressed by objects related to itself before it can be called into action."

The lectures at New York concluded his engagements for the season, and he started with his wife on an excursion which he purposed to be one of pleasure ; but the pleasure included daily visits to prisons, reformatories, schools, and asylums, and the making of careful notes as to their systems of management and general arrangements. They visited Albany, Saratoga, Schenectaddy, Utica, and Syracuse. At the latter place the Phrenological Society called a meeting in the Presbyterian church, and against his will Combe was obliged to deliver an address which, to his own surprise, occupied more than an hour. The next journey afforded one of many amusing illustrations of railway travelling in America thirty-eight years ago, which he describes in a letter to his brother.

"A railway carried us to Auburn in an hour and ten minutes. It was the third day since it had been opened. In America all the animals are free, as well as the men, women, and children. They have unbounded liberty to roam on railroads, highways, and public streets ; and, like all other free citizens, they avail themselves of their privilege. Horses, cattle, hens, and swine abounded on or close by the side of this

new railway. They had not got accustomed to the engine ; it is furnished with a squeel-pipe to frighten them away. Their natural language was a rich treat. The swine actually tried to force their fat sides through strong fences in a perfect ecstasy of terror. Most of the horses galloped off like Tam O' Shanter's mare when pursued by the witches : one bold fellow faced about, and stood panting, but boldly defying the engine and the devil, within six yards of the track. His ears were very wide. A "clocking" hen bravely offered battle and covered her chicks ; some other hens flew straight up into the air and fell down stunned with fright. The poor cows ran themselves out of breath until overtaken, and then looked as if Nick had gotten hold of them."

The engines of the trains frequently broke down, and the cars had to be dragged along to the next station by horses. This seemed to be almost as common an incident at the time as the ringing of the fire alarm bells. In Philadelphia, in New York, and in all the large towns, fires were daily and nightly incidents, so that Combe groaned Othello's exclamation : "Silence that dreadful bell."

From Auburn the Combes proceeded to Geneseo, and spent a week with Mr Wadsworth, a hospitable gentleman, and one of the largest landed proprietors in the State of New York. Amongst Mr Wadsworth's guests were Dr and Mrs Channing and their daughter, with whom Combe visited the Niagara falls. He was thus enabled to study more closely than before the character of the great American preacher, and the following should be added to his previous remarks :—

"I had many conversations with Dr Channing, and had my former opinion fully confirmed—that intellectually he is not a great man ; but morally, a very great and good man. His information is limited, and he knows the world only by books and by what people tell him. He told me that this was a great disadvantage, incident to his profession, which he could not contrive to surmount. He does not converse, but delivers an essay and waits patiently to hear an essay in return. He was frank and free with me, and we talked a great deal in this form, which might have been printed as uttered, so precise was every idea and expression. From this peculiarity, ordinary

people cannot converse with him. It arises from his large Conscientiousness and Ideality investing every idea with a character of gravity and importance. His intellect gives expression to the noble inspirations of his moral emotions. I do not mean to say that he is intellectually weak, only that nobody would discover his superiority from his purely intellectual manifestations in conversation. The remarkable soundness in his views arises from the instinctive impulses of his moral faculties. He gave proof of this by telling me that he did not think that much intellect was necessary to discover truth: all that was wanted was an earnest love of it; 'seek for it,' said he, 'and it comes of itself somehow.'"

Here is an extract from Combe's diary, written at Niagara, Sunday, 23d June 1839, which will afford a good example of the nature of his conversations with Dr Channing:—

"Dr Channing expressed his fear that savage man was more just than civilised man. The latter was more benevolent and religious, but the multiplied wants of society tempted him to infringe justice to so great an extent that very little of the quality was left; and as high civilisation could not take place in the absence of justice, he feared that this might be a serious impediment to the onward progress of the race. The Pilgrim Fathers were cold and stern; but they were high-minded men, and just. Their descendants are kind and liberal, but far less scrupulous in justice than they were. He feared that the institution of legal justice had the tendency to weaken the growth of natural justice. Many men finding laws prescribing rights, took them as their rules of justice, and laid aside natural conscience. He had been told that litigations were very numerous in this country, and that cheap law increased them.

"I entered into a full explanation of my views of justice. It results from Conscientiousness and Intellect. It is a repressing as well as a stimulating power. In the savage state there is no property and few other objects to tempt the faculties to go astray. A man with a small cerebellum may avoid seduction with little conscience: a man with a large one requires more to restrain him. So with a large and small Acquisitiveness, Love of Approbation, and so forth. In savages the organ is almost always deficient: in civilised nations it is much better developed. In the Esquimaux Colouring is deficient. They see only blue and white in the sky and snow. Perhaps for the same reason Conscientiousness is deficient in them. It is not called on to act. Conscience has much to do

in civilised life, and the organ is larger. It is larger, however, in some tribes than in others. Naturally some African tribes are honest, others thieves, just as the Germans and Italians have naturally more Tune, and the ancient Greeks had more Constructiveness and Idea ity, than the English. The modern Scotch have more Conscientiousness than the ancient, as appears by their skulls. I therefore hope for the increase of justice. It is not cultivated in our schools, and our sermons rarely mention it. Our histories are full of injustice, and we teach our children by them. We are still only emerging from the barbarous condition, and as we discover our rational nature and moral destiny, we shall cultivate justice and become happier. I mentioned the increase of justice in the administration of public affairs in Britain within my day; the decrease of litigation; the sense of honour, even among political opponents; and expressed my belief that justice is higher with us than here. He listened to all this, but the whole principles and exposition seemed to be so new to his mind that I could not guess in how much he accorded and from how much he dissented. He concurred in the hope of future advancement of the race.

"*Monday*, 24th *June, ther.* 64°.—This morning Dr Channing asked me whether I thought that something like Owen's ideas might not be realised on a modified scale, and with a more highly improved population? He could not conceive that the present state of toil and feverish pursuit of wealth, carrying suffering to so large a portion of the people, was to be eternal, and he did not see any obstacle in human nature that was insurmountable to their adopting a co-operative system for supplying their physical wants, and seeking their chief pleasures in moral and intellectual intercourse. I told him that these were precisely my views. I had opposed Owenism on account of the choice of the worst brains to fulfil the highest moral functions. I told him that the high political rank of the people in America, with a high universal education, might increase the difficulties of finding domestic servants so much as to force the higher classes into something like co-operation; but that I regarded this as still very distant."

Combe made a detour as far as Buffalo, then a town of about 20,000 inhabitants, and rapidly increasing in wealth and population. Here he found a Phrenological Society in full operation, and with so much authority in the conduct of educational arrangements in the town that they offered, if Combe would

write "Phrenology for Schools," to get the work introduced at once as a class-book in their common schools. Brief as his stay here was, he found time to give some private instruction in dissecting the brain, and to deliver a short address to the Society.

The next journey was into Canada, resting a few days at Montreal and Quebec. At this time the disputes between the British and American Governments regarding the Maine territory question threatened a serious rupture, and the Canadians were in a state of excitement on account of their relations with the home Government. Lord Durham had recently made his liberal suggestions for the tranquillising of the country; but the Tories maintained that the only regime for Canada was the sword in one hand and the statute book in the other. The result of Combe's conversations with Canadians of various ranks, and of his observations of the country, was that if the British Government wished to retain Canada, and to form a prosperous, happy, and contented people, it must give them self-government. "They are in a lethargy of ignorance and superstitution," he said. "Nothing will rouse them but free institutions: leave them to legislate and to fight their own battles in their assemblies. They will go through great tribulation, but this ordeal will prepare them for freedom. The present system merely prolongs the evil day." The absence of a thorough system of education he regarded as one of the chief barriers to the progress of the people; and he saw no prospect of an improvement in this respect unless the Canadians could be roused to make it themselves. From England he learned with deep regret that Lord John Russell had announced the abandonment of the scheme of national education by means of normal schools, which the Government had intended to introduce. "So much clamour had been raised against the bill, and such great and persevering efforts had been made to excite an adverse feeling to it throughout the country, that it would be unadvisable to proceed with it."

"Good Heavens," exclaimed Combe when he read this passage, "what a country! The priests have done this, doubtless. Poor England!"

On leaving Canada Mr and Mrs Combe journeyed to Cape Cottage, a rural boarding-house or hotel situated on the coast about three miles from Portland in Maine. Here they spent the two happiest months of their sojourn in the United States.

Although a certain number of hours were daily occupied in revising the new American edition of the "System of Phrenology," and in preparing the lectures on moral philosophy for the press, the greater part of the time was given to the leisurely enjoyment of nature. He noted the arrangements of the day in his journal:—

"*Saturday, 27th July* (1839), *ther.* 66°.—The weather is still delightful, and we spend our days thus:—Rise at 5 A.M. I spunge myself all over with salt water and use the hair glove; dress; breakfast at 7; sit on the rocks and enjoy God's beautiful world, and worship Him in spirit and in truth, from 7.30 till 9. Prepare new edition of my 'System' till 12. Sit on rocks till 1. Dine at 1. Sit on rocks from 2 to 3. Read De Tocqueville and reviews till 5. Sit on rocks till 6. Tea; sit on rocks till 7.15; read till 9. Go to bed and sleep a most delicious, sound, dreamless sleep, and awaken refreshed and happy next morning. I do not walk, because I cannot from lameness [caused by mosquitoes]. If it were not for the mosquitoes this would be a paradise of a place.

"*Tuesday, 27th August, ther.* 69°.—I have finished revising my 'System,' and am now engaged in revising my 'Lectures on Moral Philosophy.' This occupies me four hours a day: the rest of the day is spent in meals, sitting on these blessed rocks, taking a drive through this picturesque country, in walking, in reading, and writing letters. I never was happier or in better condition bodily and mentally. I thank God daily for all his precious gifts, and pray that I may use them aright. Cecy is in an equally happy frame of mind and body, and sees that she has gained strength, in all her powers, by the calls on her for exertion, and that her visit to America has not been destitute both of pleasure and advantage, amidst all the troubles and annoyances to which she has been exposed. She sings a vast and admirable collection of songs, and reads poetry to me."

One more glimpse of these arcadian days must be given:—

"*Wednesday*, 11*th Sept., ther.* 61°.—This has been a glorious day, and we have enjoyed it on the rocks. One of my amusements has been (reviving the pleasures of my youth), collecting pieces of timber from 6 to 12 inches long, thrown ashore by the sea, fitting them up with a mast, sail, and helm, and sending them forth on the ocean. Many of them have gone out to sea in excellent style; some have crossed to the opposite island, others gone up the bay, according to the state of the wind, while a few have been swamped by the waves, almost always at launching. One very strangely shaped fragment of timber, on which I placed a mast all on one side, and gave the helm a slight turn to the other, crossed with the wind on its beam. All the others were made to sail directly before the wind."

But even into this happy state the turmoil of the world and the strifes of philosophers penetrated. Dr Sewall, of Washington, reprinted his two lectures, entitled "Errors of Phrenology Exposed," and obtained testimonials from several gentlemen to the effect that they believed he had given complete proof of the fallacy of the pretended science. There were only two of the gentlemen who certified to this effect known to the general public, namely, the ex-president, Mr John Quincey Adams, and Mr Daniel Webster, the popular lawyer and senator. But the letters of both these gentlemen were rather compliments to Dr Sewall than effective condemnations of phrenology; for both admitted that they had not studied the subject, and that their opinions were formed from their friend's book. Mr Adams thanked him for furnishing arguments with which he could "meet the doctors who pack up the five senses in thirty-five parcels of the brain!" Mr Webster, however, was more careful than Mr Adams in guarding himself from misapprehension; he candidly owned that he was no competent judge of the physical and anatomical facts stated by Dr Sewall, adding—"but if your premises be well founded, the argument is conclusive." Combe took rather a comic view of this attempt to bolster up a weak argument by means of names influential in the States; and he published in the *New York Evening Post* a letter—supposed to be addressed to Dr Sewall,

but received too late for insertion in his work—by Whang-Ho-Ching, Emperor of China, in which the assertions of the writers of the testimonials, that they did not understand the subject, but were quite satisfied that the refutation of it submitted to them was successful, were burlesqued and exaggerated. This was copied into other newspapers, and created much amusement at the time. Some Americans were inclined to think that Combe, in writing the burlesque letter, made a very ungrateful return for Dr Sewall's hospitalities in Washington. To this charge he answered :—

"I beg leave to observe that I told him (Dr Sewall) personally that he had mistaken and misrepresented phrenology ; and that it was subsequently to this information that he reproduced all his mistakes, misrepresentations, fictions, and misquotations, as if he had never heard that they were objectionable. It was also long after Dr Caldwell had demonstrated in print his errors and disingenuousness, beyond the possibility of hesitation on the subject. In these circumstances his republication is a deliberate adherence to error, which no private considerations can palliate, far less justify."

In his "Notes on North America," Combe made the following comments on Dr Sewall's work :—

"As an example of his accuracy in point of doctrine, I cite the following words from my 'Elements of Phrenology,' in which the real phrenological views are stated, and I shall then introduce his representation of them :—'The phrenologist never compares intellectual ability with the size of the *brain in general ;* for a fundamental principle of the science is, that different parts of the brain have different functions, and that hence the same absolute quantity of brain, if consisting of intellectual organs, may be connected with the highest genius, while, if consisting of the animal organs, lying in the basilar and occipital regions of the head, it may indicate the most fearful energy of the lower propensities.' ('Elements of Phrenology,' p. 189, eighth edition). With this passage before his eyes, Dr Sewall represents us as saying that, 'If a *small head* be connected with a powerful *intellect,* it only proves that the *brain,* though small, is well organized, and acts with uncommon energy!'

"The following will suffice as a specimen of his representa-

tion of facts:—'Where all these fail,' says he, 'in furnishing a satisfactory explanation, another method still more amusing is sometimes resorted to in relieving phrenology from embarrassment. It may be illustrated by the following facts:—There is a celebrated divine now living in Scotland, equally distinguished for his amiable disposition, his gigantic powers of mind, and the great moral influence which he exerts upon the Christian world. This individual, it is said, has the organ of Destructiveness very largely developed, and *not having any counteracting organ very large,* it is contended by those who are acquainted with the fact, that he manifests his inherent disposition to murder by his mighty efforts to destroy vice, and break down systems of error. In this way he gratifies his propensity to shed blood.' By the words 'it is said,' as well as by the whole context, Dr Sewall obviously affirms that this is a statement or representation given by phrenologists. It is a pure fiction. No such statement, nor anything resembling it, is known to me to exist in the whole literature of phrenology. Dr Sewall cites no authority for it whatever.

"Finally, Dr Spurzheim carried with him to America several diseased skulls of uncommon thickness, which he showed in his lectures in elucidation of the rule, that in making observations we must select *healthy* individuals not past the prime of life, because in disease and old age the *skull does not indicate* the size of the brain. After his death his collection was sold, and one of these skulls came into Dr Warren's possession, who sent it to Dr Sewall. He has lithographed it, and presented it to his readers without mentioning the rule now stated, *or the use which* Dr Spurzheim made of the skull. In some regions this specimen is more than an inch thick. Dr Sewall introduces drawings of four other skulls differing very widely from each other in thickness, but, instead of mentioning the age and state of health of each of them (which he dared not do, because such information would have destroyed his own argument), he leaves his unskilled readers to infer that they are all *normal* skulls. His own words are: 'The history of the intellectual character of the individuals whose crania are here delineated I *shall not detail,* as the only object of introducing them is to show the *natural and insurmountable* obstacles which exist in *ascertaining the amount of brain by the measurement or inspection of the living head.* Such a history would be entirely irrelevant, as it could in no way aid the phrenologist in his examination. The difference of their thickness furnishes impressive evidence of the impossibility of ascertaining the volume of the brain by the rules of phrenology!' It is difficult

to decide whether the disingenuousness or the indiscretion of this statement is most conspicuous, for Dr Sewall is a professor of anatomy, and he certainly knows that the cases in question are exceptions to the general rule, and that in making the foregoing statement he is at issue not only with phrenologists, but with high anatomical and non-phrenological authorities. Magendie of Paris, for example, who is hostile to phrenology, has said that the 'volume of the brain is generally in direct proportion to the capacity of the mind,' and that 'the only way of estimating the volume of the brain in a living person is to measure the dimensions of the skull; every other means, even that proposed by Camper, is uncertain.'* And Dr John Gordon, the opponent of phrenology, in the 49th number of the *Edinburgh Review* says: 'But we will acquiesce implicitly for the present in the proposition (familiar to physiologists long before the ages of Gall and Spurzheim), that there is in most instances a general correspondence between the size of the cranium and the quantity of cerebrum; that large heads usually contain large brains, and small heads small brains.' (p. 246.)

"It is not my intention to present any answer to Dr Sewall's lucubration; this has already been done in a very effectual manner by Dr Caldwell in his 'Phrenology Vindicated,' and by Dr Bell in the 'Select Medical Library,' but this second edition is fortified with a new species of evidence, which deserves some attention. Dr Sewell presented his work to several distinguished men, *who knew nothing of phrenology*, but whose opinions are influential in the United States, and obtained their opinions of his book and the science. They wrote him complimentary letters in return, praising his book, and condemning phrenology as untrue and dangerous, and he has printed these letters in the front of his new edition! This was a cruel hoax perpetrated by him on these respectable men."

But the life at Cape Cottage possessed enjoyments which no outside influence could affect. One of these enjoyments was a visit from Horace Mann, who snatched six days from his busy life to spend in philosophical repose and conversation with Combe. The difficulties which Mr Mann had to encounter in his efforts to establish normal schools are indicated here :—

"*Aug.* 6, *ther.* 62°.—"Horace Mann from Boston arrived

[1] Compendium of Physiology, Milligan's Translation, p. 104, Edit. 1826.

on a visit to us. He is much worn in the cause of education. I remonstrated with him on his disobedience to the laws he teaches. He told me that he is engaged in establishing normal schools, and the opposition is such that he has been exhausted in meeting it, with the consciousness that if he relaxed he would be thwarted and defeated. There are 5000 teachers in Massachusetts, and to say that normal schools are necessary is resented by them as a personal insult on their qualifications. There are many authors and publishers interested in the existing school-books : to say that they are ill adapted for instruction is to affect their interest and render them enemies. There are numerous sectarian clergymen; and to expound a principle in morals or physiology which they think dangerous rouses their hostility. These various interests send forth undercurrents of discontent, and have even threatened to combine to offer open resistance to the proceedings of the Board of Education. The trustees who compose the Board have been elected for seven years, but their office is gratuitous, and they tremble at incurring loss of popularity. They approve of Mr Mann's measures, but if a serious public opposition were to arise, they would all desert him. He holds his office only from year to year, and they would dismiss him. To shape his course so as to disarm this formidable host of opponents, and yet persevere in improving schools, school-books, and teachers, is a difficult, anxious, and laborious task, and he has scarcely any mental support. He is resolved to sacrifice both health and life, if necessary, to the great cause, and will die at his post, if he is not dismissed from it for doing his duty. I have sympathised with him, encouraged him, and endeavoured to induce him to take means for improving his health. He is invaluable to Massachussets."

The following letter from Horace Mann shows how thoroughly the two champions of popular education enjoyed each other's society, besides being highly suggestive of the writer's character and interest in his great work :—

BOSTON, 11*th Sept.* 1839.

MY VERY DEAR SIR,—Since I had the pain of parting with you and Mrs Combe, I have been realising the existence of a perpetual motion, otherwise I would not have allowed so much time to flow by without reminding myself, by writing to you, of the pleasant and instructive visit which I had at Portland. Never have I passed a week in a way more congenial to my coronal region. The quiet cottage and the half-earth, half-ocean landscape, are vividly present to my view, and the old rocks

upon the shore, where the philosopher sat and discoursed wisdom, are as firmly fixed in my memory as they are in their own bed; for it will take a long time and much beating by the storms to wear them out; and when I think of the sails in the boat, and the rides in the chaise, I will not say that I grow sentimental, but I regret that I had any brain-work to do, which prevented me enjoying them as I ought.

"Since I left you, I have held six education conventions, in parts of the State nearly two hundred miles from each other, and in the intermediate places, besides being present and assisting in the examinations and opening of the normal school at Barre. At the latter place the governor gave an excellent address, on the occasion of opening the school, and it has commenced under very favourable auspices. The opening of the two normal schools, and finding suitable and acceptable individuals to take charge of them, cost me an incredible amount of anxiety. I believe I counted all the men in New England over, by tale, before I could find any who would take the schools without a fair prospect of ruining them. But I trust we have succeeded; at any rate, my night-mare begins to go off. But I will not trouble you by stating the difficulties of the problem given to me for solution, which was to do right and not offend the ultra-orthodox. I wanted your philosophic equanimity for that task.

"I have not seen Mr Capen for more than a moment since my return. Of course he communicates with you on the subject of your course of lectures.

"I have heard but the expression of one opinion on the subject of your coming here, which is universally and anxiously favourable to it. I cannot express to you my sense of undeserved honour for the insertion of my name in the new edition of your lectures on education. The just aspect in which the fact presented itself to my mind, when the dedication was shown to me, was, that it might render the expression of my sincere opinions about the worth of your works a little suspicious, as people might think that those views of their worth, which are dictated by all the judgment I have, possibly came from my gratitude for your kindness and for the expression of your good-will. But I will try to manage it in such a way that you shall lose as little as possible for conferring upon me an honour I did not deserve.

"As this letter would but just reach you were I to send it to Portland, I will leave it in the hands of our friend Capen for you when you pass through the city. My kindest regards for yourself and Mrs Combe. "HORACE MANN."

On the 12th September the Combes quitted Cape Cottage with considerable regret, but with happy memories of the days spent there, to which they frequently recurred in after years when thinking of America and noting its progress. Refreshed by his holiday, Combe began work at once. He had agreed to give a course of twelve lectures in Hartford at $3 for each ticket; and on his arrival in the town he found that again he had only half the number of subscribers he had been led to expect. He also found a Mr Young advertising two lectures on phrenology illustrated by a magic lantern. This latter attraction proved of little avail, however, for a Mr Collyer arrived who announced that he would explain the whole system of phrenology in one evening gratuitously, and he might be consulted at his hotel as to character, &c. Mr Collyer's hall was crowded; Mr Young had a very meagre attendance; and Combe was much grieved by the ridicule which this mountebankism cast upon his science. "My fame seems to be like that of a great showman in its effects," he said; "it draws a flock of minor showmen after him." He was so much disappointed by the attendance at his lectures in Hartford that he declared the course in that town to have been a mistake, and thought of returning to England as soon as possible. Meanwhile, he determined that he would not lecture again without a guarantee that he would have a fair audience. During his stay here he had another unpleasant experience: he had invested all his spare capital, and a portion of Mrs Combe's money, in the stock and notes of the United States Bank; the bank failed; and, although the loss was not large enough to cause uneasiness, it absorbed all the money he had received for his lectures and books in America.

He endured his losses with equanimity, and proceeded to Boston in November. There he found a large and appreciative circle awaiting him; but he did not again venture to give a long course of lectures. He gave three of two hours each in the Odeon Theatre: the first on the connection of the brain

with the mind, and on the evidence that the mind manifests a plurality of faculties by means of a plurality of organs; the second on the application of these principles to education; and the third on the importance of education to the United States. The theatre was crowded, and he was immediately engaged to repeat the same lectures to the Lyceum Association: he did so, and again the theatre was crowded from gallery to pit. Further, at the earnest instigation of Mr Mann, he repeated these lectures in the neighbouring towns of Salem, Lowell, Worcester, and Springfield. In doing this he yielded to the persuasion of his friends: from his first experience of the American lecturing system he had opposed the idea of attempting to convey any valuable knowledge of philosophy or science in two or three lectures delivered to an audience collected, not by any earnest desire to learn, but by a curiosity to hear what the new comer had to say. He was, however, compelled to admit that in these short courses he was enabled to do much good, when, if he had persisted in demanding a class for the full course, he would have been obliged to cease altogether. The result of the new experiment was therefore satisfactory.

He found another source of gratification in this visit to Boston in discovering decided proofs of the effect of his lectures delivered in the previous year: improved school-houses, thoroughly ventilated, had been built; there was a distinct improvement in the mode of teaching and the things taught; many members of the Board of Education showed an increase of zeal in the cause of education; and Mr Mann had embraced Combe's philosophy entirely in its application to education. Writing to Sir James Clark, he says:—

"Mr Mann assures me that I am aiding him effectually, and am advancing his labours by years. He conducts a common school journal, and lectures on education, in different districts, as well as superintends the schools. He is a man of great talent and high moral qualities. He was president of the Senate, and is a lawyer.

"All my experience convinces me that my staunch resolution to teach the philosophy of mind such as God has instituted it, that is to say, not to blink the organs to meet fashionable and bigoted prejudices, is right, and that this is the real way to produce a deep, abiding, and practical impression of the great principles on which education must be founded. I have found the attainments of the Americans on education far below what I had been led to expect. Phrenology will prove to them a boon of the greatest value. I rejoice in doing good to them, but would rejoice still more to dedicate my talents, such as they are, to the improvement of my own countrymen; but scientific, clerical, and aristocratical prejudices in Britain are more than I feel disposed to encounter, and we propose, after reprinting one or two of my books, next winter to leave Britain again, and take up our abode in Germany for some time. If the Whigs had backed phrenology in 1816, when they declared against it, it would by this time have been a tower of strength to them, by opening up the minds of the middle classes to sound and liberal views of all kinds; but they missed this good, and they have their reward."

Whilst busy travelling to the towns surrounding Boston, and lecturing, he proceeded with the preparation of his "Moral Philosophy" for the press, and he purposed, if his brother and other friends should approve the idea, to publish the work in England. He knew that there was much repetition of the "Constitution of Man" in this book, but it contained also a good deal of forcible truth that would be new to most people at the time. He knew, too, that it would stir up the saints, of Edinburgh especially, against him; but he said "I feel now quite disposed to brave all their brimstone." The source of this feeling will be discovered in the following letter addressed to Dr Combe, and it confirms observations on his own character which will be found in a future chapter. He did not spare himself in speaking to his intimate friends; but the consciousness that in all he had done and was attempting to do to benefit humanity—in advancing education, in modifying the conditions of the insane and of the criminal classes—he had been opposed by those who should have aided him, *because* he was a phrenologist and the author of the "Constitution of Man,"

engendered some feelings of bitterness, and roused his Combativeness and Self-esteem to a degree of which he was scarcely aware. He himself would have grieved more than any one if he had found the excited state of these faculties causing him to do injustice, even in thought, to others. The Doctor had been inclined to think that there was something morbid in Combe's dislike to Edinburgh society ; and the answer was this :—

" You and my other relatives are the only ties that bind me to Edinburgh. You err in supposing that my dislike to it arises from morbid Self-esteem and Love of Approbation. A prophet hath no honour in his own country is a law of human nature, and I submit to it cheerfully. You do not fully keep in view my real position there :—*I cannot do so much good to the cause and to mankind by living there as by leaving it.* I lectured and laboured on for many years in Edinburgh to small classes, and with small results, cheerfully, because *then* I could not have done more good elsewhere ; but now it appears to me to be different. Anywhere else in Britain I have, or were I to fix my residence I should have, more moral influence than in Edinburgh."

Besides, he found that in his writings he had gone as far as opinion in Edinburgh would tolerate, and yet he had much more to say. So, he felt that by keeping away from the town he would secure more independence. At the same time he wished it to be understood that " in leaving Edinburgh I am not conquered by my enemies. I am only shaking the dust off my feet and leaving a scene where I cannot be so useful as elsewhere." In the same letter he says : " I am far from regretting my visit to America, although I was greatly misinformed as to the state of the people's interest in phrenology. I have done much good and have received great kindness. You need not fear my committing myself by praising the Americans to their face and exposing them in my books. I tell them to their face what I shall publish concerning them. I contrasted the despotisms of Austria and Prussia, and the despotism of our church and hereditary aristocracy, as fetters on the activity

of the faculties, with *their institutions,* which allowed the fullest play to every power, and I preferred the latter; but I showed them that the propensities would lead them to ruin unless they trained and educated these faculties to obey the sentiments and intellect more than they have yet done. I shall never shrink from this on any side of the Atlantic."

From Boston he proceeded to Springfield, where he delivered three lectures, and thence to Albany, where he had engaged to deliver twelve lectures for $600, leaving all sums above that to Mr Hamilton, who had undertaken the whole arrangements for the course. Some of the difficulties of American lecturers thirty odd years ago are revealed in Combe's letter to Dr H. C. Watson, the editor of the *Phrenological Journal;* it also illustrates the position of phrenology in England:—

ALBANY, 16*th January*, 1840.

"I am quite aware that, were it not for the exertions of individual phrenologists, a Young with his magic lantern would be a more popular lecturer than I am, in Britain as well as in America. I have never had a large audience anywhere, except such as were prepared for me by individual exertions. But it is equally true, that in every instance I have kept my audiences steady in their attendance, and have made greater drafts on their time and attention than any other lecturer. In Manchester above 500 persons attended for two hours on four nights in the week, if I recollect rightly, and in this country I have been equally successful in sustaining public interest. The difficulty with me, therefore, is to get the people to believe in the interest of my lectures, and to *come* to hear them. After coming, they continue. Since I wrote to you last, I have delivered three lectures in the towns of Lowell, Worcester, and Springfield, and had audiences averaging 250 in each of them. I offered to lecture to them the full course, if they could muster 170 subscribers. None of them could venture to do so; but after they heard the three lectures they all offered to furnish above 200 for the whole course. By this time, however, they knew that I *could* not accept of this invitation; and they are a people so dreadfully given to boasting and compliments in talk, that my belief is that if I had closed with their invitations, they could not have fulfilled their engagements. In this city of 30,000 inhabitants, and the seat of the Legislature, Mr

Grimes and Mr Deane are regarded as far more distinguished phrenologists than I am; and if I had not *hired myself* out to a big-headed, active dentist, whose wife is sister to my brother William's wife (who is settled here), I should have had no class. He obtained 170 subscribers, and wrote to me offering me the list to take my chance, or $600, if I would give him the whole proceeds of the course. He now tells me (for I accepted the latter proposal) that he finds great difficulty to keep his subscribers up to the mark. Some have no money, and he gives them credit; some refuse to pay, and he threatens to sue them; some deny their subscriptions, till he produces their own signatures. He did not know his countrymen before! so he told me yesterday. I was told that the trustees of the Albany Female Academy would give me the use of their hall free, on paying for the lights, and giving free tickets to the trustees. Yesterday, the following demands were made: lighting for 12 lectures, $48; 22 tickets for Trustees, at $3, and 20 for teachers, at $3 each, in all equal to $126,—total, $174. In Boston a much better hall, light and fire included, cost $120 as the full price. But I need not inflict such details on you. I mention them simply as characteristic of the state of the people. 249 attended my first lecture, of whom 180 must have paid.

"I regret to hear of your resolution not to lecture again on phrenology, because if men of scientific attainments like you decline, the quacks have the whole field. I should propose that you should lecture where any city will insure you an audience before you go. You may say nothing about theology. I am printing here my lectures on moral philosophy, which were attacked from the pulpit in Edinburgh when I delivered them. I shall send you a copy in April; and if you and my brother Andrew advise me, I shall publish them in Scotland also. If I should write a book on America on my return, I shall speak pretty freely of Calvinism and its effects on the mind. As I mean to go to Germany in May 1841, I shall allow the bigots to thunder in my absence.

"Often have Mrs Combe and I had our feelings excited to disgust by the American people; but a principle has insensibly opened up itself to my mind, which is leading me to do them more justice. Here all the faculties are free to act; the masses choose governors and legislators, and control everything. Whatever degrees of order, decency, honesty, security of property or person exist, are, therefore, the results of the moral and intellectual faculties of the people governing their propensities; and viewed in this light, the masses, with all

their faults, are far superior to any in Europe. At least, if universal suffrage prevailed in Britain and Ireland, I do not believe that we should see so much justice, religion, order, and decorum, there as here. Again, the upper classes are here completely in the hands and power of the lower, and they see the necessity of educating, improving, and refining them. Hence their admirable provisions for education; but they do not know what good education is. They have the physical but not the intellectual and moral means. These, however, will come in time.

"I have been attended everywhere by some men of very superior minds, and they appear to appreciate the new philosophy, and will apply it. I hope some good will come out of my labours, for I am disposed to regard them as the greatest sacrifice which I have made to the cause of humanity. Mrs Combe is slowly sinking under the continued discomforts to which she is exposed, and I am looking anxiously for the 25th of May, when we shall sail for Liverpool. We travelled from Springfield to Albany on 9th and 10th January in a sleigh, which had merely green baize curtains between us and the air at 5° above zero. We had four horses for ourselves and luggage, and took 13 hours to 46 miles. This was on the 9th. There was only one track in the snow, and when we met a carriage of any kind, all stopped, and a track was dug out of the snow, 3 feet deep, to enable one to pass; and as we passed I was ordered to hang by the rail on the top of the sleigh, outside, to keep it from tilting over. The second day was very rough travelling, but the thermometer was only 23°. The distance was 81 miles.

"I regret to hear that you allow the idea to cross your mind of giving up the *Phrenological Journal*. But I can sympathise with you. Many a time have I felt almost despair in my phrenological labours, and particularly in conducting the *Journal*, but the higher faculties ultimately triumphed. The greater the suffering in doing good, the higher is the virtue. I often console myself with this reflection. It is this which gives us a claim to the respect of mankind, and hereafter we shall receive it. Go on and conquer. I have suffered since 1819 what you now endure. Before 1860 you will be rewarded, I shall then be in my grave."

The gentleman to whom the foregoing was addressed intimated to Combe that he had been unanimously nominated president of the Phrenological Association, which was to meet at Glasgow. He was doubtful of the success of this association,

which was modelled on the plans of the then new British Association, but he felt bound to give it all the support in his power, and pledged himself to cordial co-operation at the meeting. "I feel, however," he said, "that you might have made a better choice of a president. My manners in public are not popular. I was never liked while in the chair of the Phrenological Society at Edinburgh, and whenever I have acted in concert with other men, I have been more useful as a humble co-operator than as a leader. This is not owing solely to an unbending Self-esteem, as some of my opponents allege; my intellect does not attach the same importance to many small observances which that of other men does, and many things escape me which I should do and say to gratify the reasonable desires of others, when I am placed in a situation of authority. Another circumstance paralyses me. I have published in books and by lectures everything that I know that can be safely addressed to a public audience, and I feel myself repeating myself, and cannot act either with confidence or energy. If you propose a series of addresses adapted to an ignorant public auditory, I may repeat myself without so much impropriety; but if well-trained phrenologists are to be the persons addressed, I would rather listen than speak. Having given you these explanations, I again assure you that I shall do my *best*, and if you will tell me *what* to do, I shall be so much the better pleased."

There is a note of depression in the foregoing, due to his anxiety on account of the health of his wife, and the excessive exertions he was making. But at Newhaven—whether he proceeded from Albany to give a course of twelve lectures—Mrs Combe recovered, and he wrote with his old firmness to Professor Silliman, when questioned about physiognomy and his creed.

"In answer to the first question, how far I admit physiognomy as an ally and expounder, or opponent of phrenology, I beg to observe that all that part of my lectures which related to

natural language was intended by me to be a commentary on that subject. Each organ being predominantly active produces certain movements of the muscles, whence altitudes and expressions of features, and also certain modifications of the tones of the voice, and certain expressions of the eyes arise. The group of organs that predominate in any individual gives that expression to his countenance and gait which is permanent and to him natural. Those who read those external signs in the best way that they are able call themselves physiognomists, but, as without phrenology they cannot decipher accurately the primitive elements of a compound expression, and have a very imperfect knowledge of the primitive faculties, the combined activity of which produces that expression, their reading of character is guess work, and even Lavater himself could assign no reason for his deductions, and state no principles to guide his disciples. Phrenology has furnished the philosophy of physiognomy. Where a man has strong natural language, an experienced phrenologist can predicate the form of his head from his gestures and expression; because the predominance of certain organs, accompanied by certain forms, is the cause, and the gestures are the effect.

"You next mention that inquiries are made of you: 'Is Mr Combe a believer in Christianity?' Now, my dear sir, you must permit me to answer you in the words of the New Testament: 'By their *fruits* ye shall *know* them.' Let my life and writings proclaim the faith which animates me. And, if I give your friends no other answer, it is because my own principles prohibit me from doing so. I regard perfect religious freedom as indispensable to human happiness, honesty, and holiness. In my own country I have written strongly against Established Churches as spiritual tyrannies, the nurseries of hypocrisy, and the blasting pestilence to true religion. I have advocated with all the energy of my mind the Protestant doctrine of the right of private judgment in religion, and maintained that when properly understood it implies not only freedom from legal pains and penalties on account of religious belief, but absolute unconditional freedom from hatred, dislike, popular odium, and every form of injury on this account. Let every man have a pure conscience before God, and leave God to settle accounts with his neighbour in his own good time and way. These principles have brought on me not a little odium and abuse in my own country, but I am so far from being ashamed of them, that I hope to live to do still more for their assertion and diffusion. But you will at once see that they compel me to resist answering all inquiry into my opinions,

even privately and by persons who are not in any way under my authority, and with whom I am in no relationship that gives them a title, beyond that of general curiosity, to require me to make a confession of faith. If amidst the influence of legal establishments and strong hereditary religious bondage, I have been the champion of religious liberty at home, I cannot yield up my principles in free America. Probably from having seen the evils of spiritual tyranny at home, I am more earnest on this point than you, reared under other institutions, may be able to sympathise with; but I cannot help feeling that there is no resting-point between the resistance to all interference with conscience and absolute slavery. I prefer the Pope to the inquisition of irresponsible individuals."

The curiosity about his creed had been manifested at an early stage of his American career; the members of each sect wished to know whether or not he belonged to their body before they decided to support him. He gave the same answer to all—that his works spoke for him. He was not a teacher of theology but a humble interpreter of the laws which God had instituted for the happiness of humanity, and an anxious advocate for obedience to these laws as the primary source of all intellectual and social improvement. Whatever might be behind his public utterances was a subject for which he alone was responsible to the Creator. This to many seemed to imply that he withheld something important from the public; but in "Science and Religion" he subsequently uttered his inmost thought, and, reading it by the light of modern experience and philosophy we would be puzzled to understand why its ideas should appear so terrible thirty years ago as to make even Combe hesitate to give them utterance, if we did not remember the arbitrary laws by which the religious opinions of the people were controlled at that time. Amongst the Unitarians and Universalists he found tolerance, and amongst the Society of Friends in Philadelphia he discovered not only tolerance for the opinions of others, but respect for the right of every man and woman to an independent decision as to the creed he or she should adopt. Many of the Friends

attended the two courses on phrenology in Philadelphia, and Mrs Lucretia Mott, one of the most prominent members of the Society, a frequent speaker at their meetings, and the author of several works on the education of women and children, was one of Combe's most attentive listeners and most successful students of his philosophy. At her house he and his wife were received with cordial hospitality, and they carried away with them the memory of a lady whose simple, earnest nature had enabled her to do much good for the cause of education in her circle.

Professor Silliman understood and appreciated Combe's objection to the inquisition of irresponsible individuals, and apparently the class was satisfied too; it was in proportion to population the largest class he had found in the United States, and at the close of the course the complimentary resolutions passed to the lecturer were as enthusiastic and as grateful as those passed at Philadelphia and elsewhere. One unpleasant event pursued him from Albany to Newhaven. During his stay in the former town he had, as elsewhere, dissected a brain before a number of medical men at their request. Some newspaper writer thereupon twitted the doctors of Albany for being taught how to dissect by a foreigner; and this roused a general cry from the doctors that they had been shown nothing new. Combe's answer to the gentleman (Dr Armsby, Albany) who drew his attention to the subject reveals how carefully he had studied the brain, and how resolute he was to claim no more than was his due. The following letter was addressed to Dr Armsby:—

NEWHAVEN, CONNECTICUT, 3*d March*, 1840.

"DEAR SIR,—The *Utica Observer* of 18th February and the *Albany Evening Journal* of 26th February have been sent to me, and I have read the discussion which they contain of my dissection of the brain in Albany Medical College on 1st February with much pain and regret. On the 22d February I wrote to the gentleman in Utica whom I supposed to be the author of the "Report," mentioning that Gall and Spurzheim had discovered the passage of the fibres of the Corpora

Pyramidalia through below the Pons varolii, and that all I *claimed* was having pointed out, in print, in 1824, the fact of the convolution which runs above the corpus callosum, forming a connection between the anterior and posterior lobes of the brain, which Mr Solly in 1836 showed to be a real commissure. I added, that on that occasion we met as friends and gentlemen, and that nothing could be more disagreeable to me than to have it said that those present should be humiliated at being taught by a foreigner and a phrenologist. No man, I continued, can be humbled by learning a scientific truth, and no man is worthy of communicating such truths who does so in a spirit of triumph or arrogance.

"While, therefore, it is justice to the gentlemen who then honoured me with their presence to inform you and them of my entire disapprobation of the article in the *Utica Observer*, justice to myself renders it necessary that I should express also my dissent from the statements contained in the reply in the *Evening Journal*, and dissatisfaction with its spirit. If Dr M'Naughton in a crowd of 500 persons saw Dr Spurzheim exhibit as clearly as I did the converging fibres and Solly's commissure, he was more fortunate than others; for the writer of the article in the *Journal* correctly observes that the new mode of dissecting cannot be shown successfully to above a dozen at a time. I was not present, but I have been assured by many who were, that 500 persons were in the room when Dr Spurzheim dissected the brain before Dr Gordon. Further, I saw Dr Spurzheim dissect the brain three or four times in private to fewer persons than a dozen, and I never saw the converging fibres exhibited by him, because they cannot be shown in a recent brain, and he used such when I saw him dissect, and I have always understood that he used a recent brain also before Dr Gordon. The first time I saw the converging fibres clearly demonstrated was in a preparation by Dr Sciler of Dresden in 1837, and it was only in May 1838 that Mr Solly taught me how to show them. Finally,—No medical man whom I have seen in the United States has ever hinted to me that he had seen them, or knew how to show them, until I read in this letter that I had shown nothing that was new to you and Dr M'Naughton. Again, Dr Spurzheim did not know to the hour of his death the existence of the superior longitudinal commissure; and I have met with no gentleman in the United States, except Dr John Bell, who had seen it before I exhibited it to them, excepting, again, if the *Albany Evening Journal* be correct, you and Dr M'Naughton. I can understand that Dr M'Naughton had *read* of all that I showed, and thus

*knew* it; but so had I read a great deal about the converging fibres, but I never *knew* them, as a matter of fact, until I saw them in Dresden in 1837, and then I knew only their existence: it was 1838 before I learned the mode of exhibiting them.

"Finally,—I cannot subscribe to the remark that the reason why you and Dr M'Naughton are not 'whole hog' phrenologists is probably 'that with them the organ of Cautiousness is large, and that of gullibility very difficient.' This is about as offensive to me as the ungentlemanly expressions of the *Observer* must have been to you and the other gentlemen. It implies that all who embrace phrenology do so, not in consequence of bestowing time on the study, and legitimately employing their organs of Conscientiousness in the discovery of truth, but in consequence of possessing larger organs of *gullibility* than those who reject it in whole or in part.

"While I consider it necessary to make these remarks, I beg to repeat that nothing was, and nothing now is, farther from my intention than to pretend to instruct you or any of the gentlemen present. I am always grateful to those who show me any new process, or communicate a new truth, and I have pleasure in doing to others what gratifies me when done to myself. This whole discussion therefore has been to me most painful and unexpected."

Combe remained in Newhaven from the 15th February till the 20th March 1840; and in this town it may be said that his career as a lecturer in America closed; for although he afterwards addressed meetings elsewhere—as on the occasion of the presentation to him at New York already referred to—the professional object for which he had visited the United States was here completed. His twelve lectures having been delivered, he gave, at the solicitation of Professor Silliman and other representatives of Yale College, an extra lecture, which formed his farewell address to the American people. He had previously delivered the substance of this address in twelve other towns; but at every step he acquired new experience, and added to the discourse new thoughts and new suggestions; he, indeed, regarded this as the best lecture of the whole series. In the various towns he visited, teachers and young mechanics were admitted to his lectures at half the fee charged to the

public: for this extra lecture the admission was 25 cents, the teachers 12½ cents; but for the first time in his experience the latter class voluntarily paid the full sum in acknowledgment of the advantages they had derived from the course. The proceeds of the lecture were devoted to the purchase of the casts which Combe had used, and which were to be left in Newhaven for the use of those who desired to pursue the study of phrenology. Before attempting to indicate the character of the farewell address, it is necessary to note that at the end of the first hour of his lecture on education Combe suddenly lost memory and clear conception. A pause of ten minutes enabled him to proceed, but he did not forget the warning. That was on the 13th March, and on the 26th of the same month he noted the effects of a somewhat similar experience, which is interesting in its association with the "Constitution of Man."

"In April 1826, when I was writing the 'Constitution of Man,' I was excited into an ecstacy of mental delight, and wrote on with an untiring vivacity. I also lived chiefly on beef and bread. Dr A. Combe often told me that I was breaking the very laws that I was teaching, but I *felt* so happy and so well that I did not believe him. One day, however, after dinner a tremendous pain shot into my lower jaw on the left side, as if the bone had been put into a smith's vice and compressed into powder. It raged so for four or five hours, abated, and next day at the same time returned. My progress was now arrested, and I believed that I had sinned. My brother said that he thanked God this toothache had occurred, because, if I had proceeded much longer, I should have produced either a more serious injury to the stomach or the brain. His prescription was a drive in an open carriage for ten hours a day for ten days in succession. I got up a party, William Ritchie and his wife, and Miss Cox and myself, hired a pair of horses, and set forth in our own little open landau. The weather was so cold that we saw much snow on the hills. My brother told me not to fear the cold, that it was destined to be my medicine. The toothache abated every day. We went into Dumfriesshire, visited Burns' widow, Lincluden Abbey, &c., and on our return I was well. I profited by the lesson, did not sin again,—the tooth gradually decayed, but never ached again, and only this morning has the last fragment of it broken over by the gum

and fallen out without a twinge to indicate its departure. Cecy would not allow me to cast it into the fire, but insisted on preserving it as a relic, and record its history for her satisfaction."

Combe was impressionable; he was quick to feel sympathy or slight; Self-esteem and Love of Approbation were always active in his mind; but they were controlled by Cautiousness and Conscientiousness. Looking through these lights, his general view of the American character is expressed in the following extract from his diary, and the same opinions were boldly spoken before he left the country:—

"The true explanation of the American character is that *all* the faculties are active, and that the absence of training, either by parental or school discipline, or by public institutions, so as to produce harmony or consistency of character, is wanting. The institutions cultivate the whole powers of the individual, but they leave them to act each for itself in a state of truly republican independence. Hence it is perfectly true that Americans are parsimonious and also generous. Under Acquisitiveness they will snatch at the last cent, and practice even meanness and evasion to save a cent. But the same person who in his capacity of dealer will do this, will, when his Benevolence is strongly appealed to, give a handsome donation towards some public or private object, in amount equal to all that he will gain or save by ten years' meanness or trickery. An American will pour contempt on the president, abuse the governor of his State, hold all human authority as chaff compared with the inspirations of his own Self-esteem; while on Sundays he will quail before the terrors of Calvinism, subscribe largely for a church, and attend public prayer meetings on the evenings of the week exclusive of Sundays. In towns an American family will live in their basement story, and in the country the lady of the house will be an inmate of her own kitchen for the greater part of the day. They will live economically in private, and give as few social entertainments as possible. But they will support a very large house, have superbly furnished public rooms, and when they do give a party will sacrifice as much money in extravagant ostentation as would have enabled them to practice an extensive and enjoyable, although simple, hospitality on many days. An American possesses the most noble independence of sentiment, yet he trembles to do, or say, or think, or even to dream anything that will be unpopular. He is warlike and a boaster

in all public matters, yet from pure selfishness be abhors taxation and all the cost of indulging in these gratifications. He is envious if his neighbour be prosperous, and at the same time amazingly kind, forbearing, forgiving, and even generous if he be in adversity. In short, his various faculties play as time, place, and circumstances excite them; but a self-consistent, high-minded, harmonious moral, religious, and intellectual character has yet to be formed in the United States; and if education and training under the lights of the new philosophy will not lead to this result, it is difficult to conjecture how it will ever be attained. In all of these remarks I refer to the national character, or to that of the majority. The exceptions are numerous. I have everywhere met with individuals whose excellent and harmonious qualities would render them an ornament to any country, but they are so much the exceptions that they do not make an impress on the social circle. This condition of public character is disagreeable to strangers. There is so much that is excellent, that one's respect and sympathies are deeply excited. In another turn, so much of the inferior qualities obtrude themselves that every sympathy is chased away. In my residence among them, I have loved them and disliked them, admired them and contemned them, hoped for them and feared for them, involuntarily, and alternately, as individuals made one or other set of impressions on me, and it is only now that I am beginning to see clearly the philosophy of their condition."

The justice of his observations were acknowledged by Dr Channing, who wrote from Boston on 19th March 1840 :—

" I am sorry you have seen so much to the disadvantage of my countrymen, and yet I wish the truth to be seen and told. Not that I expect any sudden changes from the first expression of opinion. Our country is swept along by mighty impulses. The causes which act on character are extensive and exceedingly strong. There is so much in our condition to stir up restlessness, wild schemes, extravagant speculation, a grasping spirit, ambition, and fanaticism in a thousand infectious forms, that there is not much chance for reflection, for moral self-determination. Something may be done to stay the torrent, but merely moral influence cannot avail much. The stern terrible lessons of providence are needed by such a people, and these form a part of every nation's experience. It seems to me that never was a people so tried and tempted as ours. Freedom alone, so unobstructed as we enjoy it, is a sufficient trial; but in addition to this, are our immense territory with

its infinite and undeveloped resources, the innumerable openings for enterprise, the new and unexampled application of science to art, the miracle of machinery, of steam by land and water,—and all these together are enough to madden a people. That a worldly, national, mercenary, reckless spirit should spring up in these circumstances we must expect. Few look at the present stage of society with less satisfaction than I do, and yet it seems a necessary stage, and I see in it the promise of something better. The commercial system, which is the strongest feature of our times, is for the most part my abhorrence; and yet I do see that it is breaking down the feudal system, the military system, old distinctions, and old alienations, and establishing new ties among men. I therefore hope. Nor do I think moral means useless, though other causes are for the time triumphant.

"You and I may still work in faith. The reckless activity of the people is better than torpidity, and there are good minds open to truth. I suppose I live in the most illuminated region, and I do see, amidst many unpromising circumstances, a spirit of improvement at work, especially among the labouring class. I was surprised to learn that you had so small a class here. I thought it was three or four times as great. I am confident, however, you did not labour in vain. Phrenology, properly so called, may not have made much way; but your view of education and society found a response in many minds.

"I thank you for your remarks on my lectures: you were right in thinking that I like the greatest freedom of criticism. My principal objection to criticism is, that it recalls my mind to what I have written. When a work of mine is fairly through the press I wish to shake hands with it, and say a last word of blessing, and to know it no more."

Combe's view of the philosophy of the condition of the American people was plainly expressed in his final lecture. He contrasted the social and political conditions of Austria, Prussia, and England with those of the New World. In the two first-named countries he had found despotism producing an orderly, quiet-going people; but they were machines, not intellectual beings,—they were like sheep, driven by a superior power, and content because they were not permitted to know the joys of freedom. In Britain there was freedom, but the people were trammelled and weighed down by the traditions of

an established church and an hereditary aristocracy, which narrowed their judgments and deprived them of half the benefits of their liberty.

"The hereditary peerage," he said, "operates injuriously on the lower and middle classes of society, by leading their active and ambitious members to turn away from their fellows whom they should protect and advance, and to adopt the interests and prejudices of the aristocracy into whose ranks they aspire to gain admission. The second obstacle to the free action of the mind in Britain is the existence of established churches. These have consecrated opinions formed in the dawn of modern civilization by theologians who partook much more of the character of monks and schoolmen than of that of philosophers and practical men of the world; and these opinions stand immovably enacted and ordained by Parliament as the legal guides to salvation, against which advancing reason and science employ their demonstrations in vain. A vast priesthood, amply endowed to maintain these opinions, resists improvement as innovation, and denounces free inquiry as profanity and infidelity. The consequence is the reign of hypocrisy, and the prostration of the religious sentiments by many individuals at the shrines of interest and ambition."

He believed that legislative articles of faith and endowed churches trammelled "the wholesome activity of the superior faculties of the human mind," and in that respect became impediments to the advancement of civilization." At the same time he acknowledged that there were hundreds of thousands "of intelligent, good, and sincerely Christian men of all ranks" reared under the sway of the hereditary peerage and established churches. But he said: "Another form in which the established churches of Britain oppose civilization is that of hostility to popular and liberal education. They profess to desire the education of the people, but demand the entire control of the means which the Government may devote to this object. This demand is not only unjust to the dissenters, whose contributions form important elements of the national wealth, but injurious to the whole community, because its avowed object is to obtain the right of fashioning the religious

opinions of all future generations in the moulds of antiquity, which are already worn out; or, in other words, of exercising a spiritual tyranny over unborn multitudes of men." He regarded all parliamentry regulations of faith as bad in themselves and as serious obstacles to the independent inquiries of the best minds into religious matters. The American people were free from these trammels; but he saw that so extensive was their liberty that they occasionally degenerated into licentiousness. "Your citizens, in paroxysms of excitement, indulge their animal propensities in violence, outrage, and injustice, and the law is too feeble to protect the objects of their displeasure, or to punish those who have set it at defiance." He urged that as happiness consists in the free play of all our faculties within their legitimate spheres of action, and as this kind of action can exist only when the animal propensities are subjected to the control of the moral sentiments and intellect, therefore to attain this state "there must be subordination, restraint, self-denial, the power of self direction,—in short, there must be *government,* and enlightened government." The institutions of the United States had done everything to set the faculties of the people free, but they had done too little to guide them in the right path.

Basing his argument on these principles, he proceeded to speak of the great necessity of educating the people to understand their position and their duties to society, and the necessity of training teachers to instruct them. He lamented the difficulties which Horace Mann had to encounter in his efforts to organise training colleges, and pointed out that it was an ignorant and wicked economy which deprived the coming generation of the knowledge requisite to progress in civilization.

"An ignorant public opinion is, to the wise and good, a revolting tyranny," he said. "In this country you have chosen public opinion for your chief regulating influence, and it is impossible for you to substitute any other. You have established universal suffrage, placed supreme authority in the hands of your majorities, and no human means, short of military con-

quest, can deprive that majority of its sway. You have, therefore, only one mode of action left to reach the goal of national happiness: enlighten your people, teach them whatever is necessary for them in order to guide their faculties aright—*train* them to self-control, *train* them in youth to bend all the inferior feelings under the yoke of morality, religion, and reason. In short, educate them, and educate them well."

To accomplish this they stood in need of a philosophy of mind capable of guiding their steps in the effort to impart education. Many might think that "common sense" would suffice to enable them to manage successfully their political and educational institutions. But common sense would not suffice without knowledge. "A blacksmith will probably assure you that common sense is sufficient to enable you to farm, if he knows nothing about farming, but if you ask him whether "common sense will enable you to shoe a horse, he will unhesitatingly answer that, if you try the experiment, you will probably get your brains kicked out for your rashness and presumption. Do you imagine, then, that the successful direction of the affairs of a great nation, and the training of the human mind, demand less of scientific skill and experience than shoeing horses?" He directed attention to the great diversity of the methods of teaching adopted by different masters, and this diversity indicated that our ideas of morals, religion, and education did not yet rest on a scientific basis—that we did not enjoy any sound and practical philosophy of mind. Phrenology would systematise the methods of training and instruction. The freedom of America rendered it imperative that the youth of the country should be taught "the specific knowledge of the constitution and powers of physical nature, and the means by which they may be applied to the promotion of human happiness; of the constitution of the body and the laws of health; of the constitution of the mind, and the means by which we may be best trained to the discharge of our duties in the private, domestic, and social circles; of the laws by which wealth is created and dis-

tributed; and of the influence of morals and legislation on the welfare of the individual and society."

He had noted the number of sects into which the religion of the country was divided; this he did not regard as dangerous. But it showed that Christianity was not yet understood; and that in past ages the Scriptures had been misinterpreted. In political affairs he condemned the conduct of elections as immoral; he commented severely on the lynch laws, the wild speculations, the bank suspensions, negro slavery, the treatment of the Indians, and the frequent defalcations of public officials. He appealed to them to remove these stains upon their character. "Yours is a noble destiny," he said. "Providence has assigned to you the duty of proving by experiment whether man be, or be not, a rational and moral being, capable of working out his own way to virtue and enjoyment under the guidance of reason and scripture, unfettered by despotic power, and unchained by law-enacted creeds. . . . . You will prove the true strength of your moral principles, when you restrain your passions by your own virtuous resolves, and obey just laws enacted by yourselves."

It was, of course, part of his object to show them how the science which he had come to explain—not to teach, for that would have required a much longer period than he could remain in America — would help the people of America to attain the objects which he believed to be necessary to their happiness. So, he said in conclusion:—

"Phrenology, when generally taught, will not only render your citizens far more discriminating in their estimates of the qualities of public men, but it will give them confidence in moral and intellectual principle; it will induce them to seek for, draw forth, elevate, and honour the good and the wise, who at present are too often borne down and excluded by noisy egotism and bustling profession, and left unemployed in the shade. It will also enable the good to recognise each other, and to combine their powers; it will give definite forms to their objects, and union to their efforts. In short, it appears to me to be a great instrument presented to you by Providence to

enable you to realise that grandeur and excellence in your individual and social conditions which the friends of humanity hold you bound to exhibit as the legitimate fruits of freedom. In presenting to you these views, I exercise that freedom of thought and of speech which your institutions declare to be the birthright of every rational being; but I do not construe your attention in listening to them into approval of their substance; nor do I desire that your countrymen should hold you answerable for either their truth or their tendency. We must hear before we can know, and reflect before we can understand; and truth alone can bear investigation. Embrace, therefore, and apply whatever I may have uttered that is sound, and forgive and forget all that I may have stated in error. By your doing so the cause of civilization will be advanced; while we, although differing in opinion, may live in the exercise of mutual affection and esteem. With my warmest acknowledgments for you kind attention, I respectfully bid you farewell."

The lecture was published with some additions in the third volume of his "Notes on the United States of North America" (1841), and then made even a deeper impression than when personally addressed to the people. Horace Mann said of it: "Your views on American civilization are sound and judicious, and written in a spirit of philosophic candour which constitutes one of the great excellencies of all your writings." The people appreciated the courage with which Combe told them unpleasant truths, and this fact increased his faith in their future.

Leaving Newhaven on the 20th March 1840 with feelings of sincere respect for its inhabitants, the Combes sailed to New York. There Combe settled accounts with his banker (Mr J. J. Palmer), and was gratified to find that the investments which he had made and induced others to make in the States Bank would not prove such entire losses as he had been led by recent events to expect. They proceeded on a tour to the West accompanied by Horace Mann, whose society and conversation afforded Combe the highest pleasure. They passed through Philadelphia, and visited Baltimore, Wheeling, Ohio, and Cincinnati. From the latter place he was taken to North

Bend to see General Harrison, who was in the following year elected president of the United States. He described the general thus :—

"He is sixty-seven, slender, stoops, of middle stature, and nervous and bilious temperament. His anterior lobe is long, tolerably high, moderately broad and compact; upper and under regions equally developed. His Alimentiveness and Acquisitiveness seem deficient. The base of the brain in front of the ear is narrow, above and behind full ; and the coronal region is average. His appearance is more that of a literary than that of a military man; it is gentlemanly, and his manners are simple, kind, and characterized by excellent taste. In short, he is like a man who has seen much of the world, moved in the best society, and who retains the polish of social life with the simplicity and kindness of the desert."

At Louisville Combe found his able coadjutor in the work of extending a knowledge of the science of Gall and Spurzheim, and his own good friend, Dr Charles Caldwell. But the severe illness of the latter prevented much intercourse. Dr Caldwell had been doing in America what Combe had been doing in Europe for the advancement of phrenology, and to the end of his life struggled to teach its lessons in the face of much opposition. From Louisville Mr and Mrs Combe travelled to Frankfort, Lexington, Maysville, again to Cincinnati, up the Ohio to Pittsburgh, Johnston, Harrisburgh, and then to Philadelphia, whence they proceeded to Staten Island, where they remained until the 26th May. During the brief rest here they saw a good deal of Dr Andrew Boardman, who had reported and published Combe's lectures in America.

At length came the day for which Mrs Combe had often yearned. On the 1st June they embarked on board the "British Queen ;" but the kindness which they had experienced during the last few months of their sojourn in the States induced her to say that "the idea of our returning and ending our days here does not appear either improbable or disagreeable." One of their regrets in leaving America was that they had been unable to meet Fanny Kemble (Mrs Butler), who had

always been beyond their reach. On board the vessel they found Mr Wilson, the vocalist, who had gone out with them in the "Great Western," and their acquaintance was renewed. The passage to England was swift and pleasant. Combe wrote in his journal:—

"Cecy has enjoyed this voyage and been gay and happy. She sings her songs and amuses me with her imitations, every morning when dressing, in the sweetest style. She walks a great deal on deck, reads and writes, and is altogether in a delightful frame both of mind and body. She has made a noble sacrifice to affection and duty in encountering and bearing with so much equanimity the privations incident to our American visit, and she enjoys the consciousness of having done well, and of having established new claims to my affection and esteem. The trials, experiences, and ideas carried home to her mind by these twenty months have done her moral and intellectual powers good, and her health is not injured. I thank God very sincerely for his bounteous gifts to her and to me, and am persuaded that the recollection of our visit to the United States will afford us lasting gratification."

He did not view the shores of England with the joy which wanderers usually experience on first sighting "home." He looked with somewhat jaundiced eyes upon his country, as "a field in which the obstacles to the progress of moral right and reason seem at first sight almost insurmountable," and he proposed to leave it again for a season as soon as the objects of his present return were accomplished. But he believed that the right principles were at work amongst his countrymen, and he said: "The day of regeneration may be distant, but it will come; and it shall be my greatest pleasure to advance its approach, although only by one hour, if so much be granted to a humble individual." On the 17th June the "British Queen" anchored at Blackwall, and Combe wrote in his diary: "Here ends my visit to America, which I look back to with great satisfaction. We have suffered "some," as the Americans say, but I hope that we have learned more, and done some good, besides enjoying much."

# CHAPTER III.

1840–1842—EDINBURGH— STATE OF HIS HEALTH—GORGIE COTTAGE HIS ADDRESS TO THE PHRENOLOGICAL ASSOCIATION IN GLASGOW — ENGLISH EDITION OF THE "LECTURES ON MORAL PHILOSOPHY"—THE EDINBURGH REVIEW—CORRECTIONS IN THE "MORAL PHILOSOPHY" AND THE "CONSTITUTION OF MAN"—"NOTES ON NORTH AMERICA DURING A PHRENOLOGICAL VISIT"—DISCUSSION WITH PATRICK NEILL, LL.D.—TRINITARIANS AND UNITARIANS—LIBERTY OF CONSCIENCE—DR ROBERT CHAMBERS ON PERIODICAL LITERATURE—CONDITION OF THE POOR IN SCOTLAND AND AMERICA—"THE PHRENOLOGICAL JOURNAL"—DR ROBERTON'S BEQUEST—DEATH OF MRS COX—SCHISM IN THE PHRENOLOGICAL ASSOCIATION—SERIOUS ILLNESS OF DR COMBE—GODESBERG—MANNHEIM—PREPARING LECTURES IN GERMAN—LECTURING IN HEIDELBERG UNIVERSITY—ILLNESS—THE JOURNEY HOME—DEATH OF DR CHANNING.

COMBE remained only six days in London, and on the night of the 23d June 1840 sailed in the "Royal Victoria" for Leith, and landed at Granton Pier on the night of the 25th. The weather had been dark and gloomy during the passage, and the first vision of his native city and its precincts was not a bright one even for a traveller who rejoiced in his return; and Combe was not in that mood. "We landed amidst dark clouds and gloom," he wrote. "The foliage of the trees is dark, withered, stunted, and undeveloped, the growing corn looks yellow and injured; the people, few in numbers in the streets, looked poorly clad, and moved as if creeping along; the houses were black and dingy; and altogether the first aspect of Edinburgh in this weather was anything but agreeable. We found most things so exactly like what they were when we parted, that the interval seemed like a span. We found all our relatives well, in good health and in prosperity, and were

most kindly greeted. Once more we thanked God for all his mercies and bountiful gifts to us in our lives and travels."

There is no doubt that his health was deficient in tone at this time, owing to his almost incessant exertions in America; the lectures and the excitement attendant on them formed only a part of the wear and tear which he had to endure: there had been the daily inspections of schools, asylums, and prisons; the rapid, and often very uncomfortable, journeying from place to place; and the thousand social duties thrust upon him, to try his strength. Mrs Combe, watching it all, expressed to Dr Combe, in a letter from America, something very like fear for her husband's health.

"Firstly and foremostly, then, in answer to yours to me that you do not like to hear of Mr Jokeum [a pet-cognomen by which Combe was known to the family, suggested by his signature, Geo. Combe, pronounced as two short syllables], holding forth for two hours and twenty minutes—no more do I; if there is anything I wish changed in phrenology it is that there might be a short or royal road made to it. Its expounders are certainly the hardest working and most hard worked of mortals! Not only the subject itself, but all its adjuncts, effects, side walks, and the fame it brings with its accompanying halos of glory, are wearing and wasting to the mere mortal man! By this you are to understand that our beloved great man is looking pale and thin and more like his recovery from the influenza six years (nearly) ago, than I like to see him. I do not tell you, or think myself, that he is otherwise than well. I only mean that he needs watching, for any casualty that might arise would not find him so well prepared to meet it as at some other times. He is happy, too—being engaged in his favourite pursuit, and with all his best faculties in constant action, so that I do not *fear*. I only sit with my eyes open, and constantly fixed on him, as one would on a little child, to be ready to catch it when it falls. We did place an interval of ten days between the New York course and this one [Philadelphia], and he did say he was refreshed, but if you had seen the quantity he did and said and wrote and heard, you might have questioned whether this was rest; and yet I know not how he could have avoided any of it! This is what I think perhaps he will not quite allow, but I put it down, as a record. If all turns out well, why so!—if not you will remember this letter. If (*as I think*) it

shall be found that, physically and mentally, he has lived for 6 or 8 or 10 years in these two, be it considered and allowed for, and not wondered at. Meanwhile, his sweetness and patience under circumstances often very trying to a man whose time is valuable, are nearly imperturbable, though I think his firmness often yields to his benevolence in the demands made on his leisure; but that, you will say, is a fault on the right side. *Our* intercourse is straitened and taxed in a way that exercises *my* incipient philosophy almost as much sometimes as did a month's separation from him formerly! I cannot now recollect the time when I had half an hour's undisturbed possession of his ear! but 'it's all for the good of the souls and the bodies' of the people, so I submit the best way I can."

Combe had not so completely recovered from the mental and physical fatigue which he had undergone as he thought; and this will account for the despondent tone in which he wrote of his native land on his return. After remaining in Edinburgh for a few weeks, he removed to Gorgie Cottage, Slateford, within two miles distance from the town. In one of his letters he describes the place and his life there:

"We prceeded to search for a residence, and have found one so entirely to our taste that although we had engaged a magician's power we could not have surpassed it. It is an ornamental cottage of two stories, picturesque outside, and within most convenient, standing in an enclosure of two acres, laid out in fruit trees, forest trees, shrubs, flowers, and grass, with gravel walks, and a few useful vegetables. It is embosomed in trees, yet from standing on a gentle eminence it has an open prospect to the most beautiful country near Edinburgh, which, after all we have seen, we still regard as very lovely. I am obeying 'the laws,' beautifully. I rise at seven, write my book on America from eight to nine, breakfast at nine, and talk nonsense till ten. At ten I go into the garden and hoe hard till eleven. I then resume my composition till one. At this hour I hoe again till two. At two dine, and sit idle till three. From three till five I take a walk or a drive in our little open carriage with Mrs Combe. From five to seven I write letters and revise a new edition of my 'Lectures on Moral Philosophy.' At seven we have tea, and occasionally visits from friends from the city; and the remainder of the evening is devoted to conversation, music, light reading, or walking, as we have still good day-light here till nine P.M.

In this happy retreat, with congenial work in hand, he was speedily able to say "the disagreeable incidents that occurred in our travels are forgotten, and all the good remains in our memories." His work proceeded rapidly, and early in September the lectures on "Moral Philosophy, or the Duties of Man considered in his Individual, Social, and Domestic Capacities," were nearly ready for publication. He was obliged to interrupt this work in order to proceed to Glasgow to attend the meetings of the Phrenological Association, of which he had been appointed President for the current year (1840). The Association originated in a suggestion made by Sir G. S. Mackenzie in the *Phrenological Journal*, March 1835; in August of the same year the Dublin Society passed a resolution that a General Association of the Phrenologists of Great Britain and Ireland should be formed. In 1838 a meeting was held in Newcastle, and the Association was instituted. The second meeting was held in Birmingham in 1839, and this meeting in Glasgow was the third. Combe had been from the first doubtful if the time were ripe for the establishment of the Association, but he was ready to give it all the assistance in his power, and it was his journey to America which prevented him attending the previous gatherings.

The business of the Association commenced on the 17th September in the hall of the Mechanics' Institution, which had been gratuitously placed at the service of the Phrenologists. Combe's inaugural address was attended by a large audience, comprising, as usual, many who were attracted by curiosity to learn something of the new science, and to see the well-abused author of the "Constitution of Man." As the address contains a very clear summary of the general characteristics of phrenology and its uses, it is quoted almost in full. After sketching the rise of the Association, he proceeded:—

"Allow me to congratulate you who are here assembled, and phrenologists generally, on the great object which has been accomplished by the institution of this Association. The first

difficulties have been surmounted, the machinery has been devised and set in motion, and we have before us a splendid field of exertion. Phrenology, as a branch of physical science, gives scope to the talents of those who are fond of observation, and love to approach nature in her most palpable forms. The structure and connections of the brain, the indications of the development of this organ presented by the skull, its modifications in different classes of animals, the effects of age, temperament, and disease on its functions—are subjects of high importance, and well calculated to exercise a mind capable of scientific research. By the accurate observation of nature, the real foundation of phrenology as a science may be discovered by every intelligent inquirer who will bestow on it adequate attention. Far from shunning the scrutiny of a minute investigation of the facts on which we rest our inductions, phrenologists are constantly inviting, nay ardently soliciting such a trial. In proportion to the extent and accuracy of any individual's observations is the strength of his conviction of the truth of the doctrines which we are now next to advance.

"It will be a leading object with the members of this Association to bring forward facts and illustrations as numerously as possible. I respectfully recommend to every gentleman to become a close observer and rigid investigator; and while he listens with becoming attention to the facts adduced by his fellow labourers in the science, to omit no opportunity of verifying them himself by a direct appeal to nature.

"One difficulty in the department of observation has been experienced by every practical phrenologist. While ours is really a science of observation, we possess no instrument or other means for giving precise indications of the size of the different parts of the brain. This deficiency is a constant theme of objection in the mouths of our opponents, and is a subject of regret with those of our own members who, trained in the rigid school of experiment and observation applicable to inorganic and even to organic but non-sentient matter, desire to see the same certainty of admeasurement introduced into phrenology. Many endeavours have been made by ingenious individuals to invent instruments for measuring accurately the size of the different parts of the brain in the living head, but none of these, within my knowledge, has been entirely successful.

"When I was in Philadelphia, in the beginning of 1839, this subject engaged much of the attention of Dr Morton, author of the splendid work on the "Crania Americana;" of Mr John Philips, a gentleman possessed of high mechanical talents, who devoted himself to the subject in conjunction with Dr Morton;

and of myself: and a mode of measurement was devised by Mr Phillips which is described in Dr Morton's work, and which was practised by them with a view to determine scientifically the size, not of each minute portion, but of the great divisions of the brain, the anterior, the coronal, and basilar regions; but even these endeavours led only to approximations to precise results. We remain, therefore, still in the condition of judging of the size of the different parts of the brain only by observation and estimation. We possess rules, however, to direct us in our estimates, and these I regard as sufficient to enable us to distinguish, with little danger of mistake, the relative proportions of the anterior, the coronal, and the basilar regions of the brain.

"In regard to the individual organs, I solicit your attention to two points that should always be distinguished, although they are often confounded, especially by our opponents, namely, the possibility of discovering the functions of particular parts of the brain, and the possibility of applying our discoveries in all instances. In a strictly scientific inquiry, it is only the first that we are bound to establish. If we can show that it is possible, in a sufficiently large number of instances, to distinguish the size of particular organs without risk of mistake, and to observe accurately the manifestations that accompany different degrees of size, phrenology may justly claim that degree of certainty which constitutes knowledge a science, although some difficulties should lie in the way of its practical application to individual cases.

"It will be admitted by every practical phrenologist, that it is possible to discriminate the size of each organ if we resort to extreme cases. I cannot conceive the condition of a mind unable to distinguish between the size of the organ of Ideality in the head of Dr Chalmers and its size in that of David Haggart,—I mean so to distinguish the difference as to arrive at as positive a conviction of the organ being large in the former and small in the latter, as he could reach in contemplating two figures, that the one is a square and the other a circle. And if he have adequate opportunities of observing the mental manifestations, he will receive an equally satisfactory conviction of the difference in them also. The like may be predicated respecting the other organs. A sufficient number of these extreme cases exist, and are accessible to all serious inquirers, to prove the real connection of particular mental powers with particular portions of the brain.

"It has been said that the proposition that the brain consists of a congeries of organs is only hypothetical, because no one

has been able to demonstrate in the brain the separate existence of the so-called organs. Certainly we have not been able to demonstrate it to the eye and to the touch, but we are able to do so to the understanding. I mean to say, that when the eye perceives the difference in the part named the organ of Ideality between Dr Chalmers and David Haggart, and the understanding, by means of an extensive induction of facts, arrives at the conviction that the want of the peculiar feeling named Ideality is connected with the deficiency of size in this particular part of the brain and no other, and that the possession of it in a high degree is connected with the large development of this part and no other, the inference that by this part exclusively the power is manifested is perfectly legitimate. We may dispute whether the part should be called an organ or not, but the merits of this dispute will be found to involve only the definition of the word organ. If we limit the meaning of the word to parts the boundaries of which we can see or feel, such as the eye and the auditory nerve, assuredly the cerebral portion is not an organ in this sense of the word; but then it follows that the posterior column of the spinal marrow is not an organ of sensation, nor the anterior column an organ of motion, because the line of demarcation between them is not ascertained. If, however, we define an organ to mean a particular part whose locality is ascertained, and which can be demonstrated to be connected with a particular function, then the portions of the brain marked out by phrenology are organs, and the posterior and anterior columns of the spinal marrow also are organs of sensation and motion respectively. The *understanding* is satisfied that they are organs, although the *senses* are not. But the same deficiency of visible and tangible evidence pervades other sciences. No philosopher ever saw or handled the cause of attraction or gravitation; the whole science of astronomy rests on inductions from the phenomena of its manifestations merely. A large portion of the science of geology also is composed of inductions from phenomena, and we believe in the deposition of certain rocks by water, and in the ejection of others by fire, with the most assured conviction, although we have not seen either the actual deposition or the actual ejection of any of them. Medicine also, as a practical art, is able to exhibit few of the causes of the disease of which it treats to the eye or the sense of touch, yet we do not hesitate to believe in these causes, and to act on our belief.

"I have entered into these details, perhaps unnecessarily, respecting the evidence on which phrenology rests; but I proceed to add that cases certainly do occur in which it is im-

possible to determine with precision the relative size of some of the organs. In these cases phrenologists differ in opinion; their differences are seized hold of by opponents as evidence that the whole doctrines are a mere tissue of conjectures, and that there is no conclusion within its whole circuit which rests on a really satisfactory foundation. Every phrenologist feels the injustice of this mode of treating the subject, but every one does not see the answer to the charge. Besides, in this meeting—a meeting composed of phrenologists—it is to be expected that the most striking cases of development and deficiency on which the science rests, will not be those which will be brought most extensively forward, but that we may be called on to consider and discuss difficult instances regarding which many of us may differ in opinion; and I should regret if any of our own less experienced members, or of the visitors who may occasionally listen to our proceedings, should imbibe the impression from them that our whole science is still matter of dispute among ourselves.

"I consider the foundations of phrenology to be as palpable as the sun at noon-day, and as impregnable as the solid rock, if we seek for its evidence in cases of extreme size and extreme deficiency in different parts of the brain; but I admit that cases of special combination, and others of nearly equal development of many organs, occur, in which its application is difficult, and I believe that the like may be predicated of most other sciences founded on observations of nature.

"Geology is, like phrenology, a science of observation, and we have a recent instance showing that while, as a whole, it is surely and rapidly progressing, its details are, in many points, subjects of uncertainty and dispute. 'In all the geological maps of England which I have seen,' says an enlightened geological friend, 'from Conybeare and Philip's in 1822 to Walker's in 1837, the stratified rocks of Devonshire are marked as clay-slate and greywacké; Professor Philip's, so late as 1837, held the lower part to consist of these rocks, and the upper of millstone grit. Mr Delabeche in 1839 was nearly of the same opinion, substituting the term 'Carbonaceous series of Devon and Cornwall' for millstone grit. Yet the opinion thrown out by Messrs Murchison and Sedgwick a few years ago has recently been confirmed by an examination of the fossils, and the inferior portions of these rocks is found to belong to the Old Red Sandstone formation, the superior to the coal formation. Let it be observed that the dispute in this case did not relate to the tertiary beds, which have only begun to be studied within these few years, but to the older rocks whose characters were sup-

posed to be sufficiently known even in the days of Werner.' How often, also, does the geologist experience difficulty in distinguishing between rocks of igneous and those of aqueous origin, in particular instances in which they appear almost to run into each other, although, in the general case, the differences between them are striking. He would be an unjust adversary who, from these difficulties and differences in opinion amongst eminent geologists, should argue that the whole science is involved in uncertainty, and has no solid foundation in ascertained facts.

"I have hitherto spoken of phrenology chiefly as a branch of physical science; but it presents another and an almost boundless field of interest as the philosophy of the human mind. In this respect it is unlike, and, in my opinion, it excels, most of the other sciences. In establishing the functions of a particular part of the brain, we ascertain a primitive faculty of the mind. When we have fixed on a sure basis, our knowledge of each primitive mental power, its sphere of action, its uses and abuses, and the morbid aberrations to which it is liable, we have laid the foundation of the philosophy and practice of education, because education consists in training, instructing, and directing the primitive faculties of the mind; we have presented materials for the construction of a sound and practical system of ethics, because ethics or moral philosophy is simply an exposition of human duty, founded on the nature and objects of the bodily functions and mental powers; we have lighted the path of the physician in the treatment of insanity, because this disease has its origin in the departure of the cerebral functions from the state of health, and a correct knowledge of their normal condition is the very foundation of sound views of their phenomena when diseased; we present principles of the greatest value to the criminal legislator to guide him in his enactments, because his object is to restrain the mental powers of individuals from abuses, and phrenology points out to him the causes within the mind itself, and also those external to it, which most vigorously excite each particular faculty to action, and crime is the result of excessive or ill-directed action of one or more of our primitive desires.

"With such a field of interesting investigation before him, the mind of the phrenologist is prone to catch fire, and launch forth on the vast ocean of speculative discussion, instead of confining itself to the sober limits of correct observation and cautious induction. It is to many minds a captivating employment to assume data, instead of observing facts, and to weave a gossamer web of the imagination, instead of practising the rules

of a rigid logic. In our discussions on the present occasion, it will be desirable that our members should restrain their ardour of speculation, which is so captivating to vivacious and ingenious minds, when presented with a theme worthy of their powers, and should rely on facts, and direct and logical inferences from them, rather than on bold theories for attaining the objects of our meeting.

"In the observations which I have hitherto made, I have had in view chiefly the proceedings of the Association as an assembly of confirmed phrenologists. Let me now address a few remarks to those who may honour us with their attendance in the character of mere inquirers into the evidence and objects of phrenology.

"Many individuals are to be met with who approach phrenology in a spirit not only of doubt but of disdain: who come to listen to a phrenological discussion, not with a candid mind open to conviction, but with a captious, hostile disposition, and whose observations are, 'Show *me* this,' 'Convince *me* of that,' and 'May not the case be so and so'—constantly labouring to turn aside evidence and truth, and indicating by their whole manner that these are unwelcome guests to their understandings. We have but one answer to make to such contentious inquirers: In all other sciences, conviction can be obtained only by a serious and candid application of the mind to the study of the subject itself, and phrenology forms no exception to the rule. In studying this science, the inquirer must begin at the rudiments; and he must lay aside the notion that it is of so trivial a nature, and so simple, that he may master it in half an hour, or that by attending a few lectures he may become wiser than its professors who have studied it for years. Phrenology, when viewed in all its bearings, is perhaps one of the most difficult of the sciences. To master it, the student must be a patient and accurate observer of size, form, and temperament; he must possess a mind capable of analysis and combination; and he needs an extensive practical acquaintance with the phenomena of daily life. We have among our own members individuals, skilled, perhaps, in other sciences, who have applied no small portion of their attention to phrenology, and who have become convinced of its essential truth, but who still meet with many perplexities and occasions for doubt. I have generally found these to be non-practical phrenologists —that is to say, men who did not minutely examine living heads, and observe mental manifestations in the theatre of life. From the very nature of the science (it being one founded on the estimation of form and size, and of the manifestations of mental

power which do not admit of specific measurements) it is not susceptible of demonstration by *reported evidence.* The student must go to nature, and learn to *observe* and *estimate* for his own satisfaction. From the first day when I entered on this study, I never derived conviction from reports of other men's observations; and if I had not gone to nature, I should probably have been involved in perplexity and doubt. I beg, therefore, respectfully to state to intending inquirers, that I know of no royal road to this science, and that, much as we desire to extend a knowledge of it, the very principles which it teaches serve to show that we shall in vain endeavour to instruct those who approach us with the demand, 'Show *me*,' 'Convince *me*.' We assure such persons, that we shall be most willing to afford them every assistance in their studies; but that they must *convince themselves* by observation and reflection. This Association meets not to teach the elements of phrenology, but to advance and diffuse it. Our friends, therefore, who favour us with their attendance as visitors, are entreated to make the necessary allowances for the difference between the state of mind of those who have long studied this subject and of themselves, if they are now approaching it for the first time.

"To encourage inquiry, however, in a right spirit, I may advert shortly to some of the uses of phrenology. It is the philosophy of mind, and it enables us to know ourselves. It shows that we possess animal propensities, moral sentiments, and intellectual faculties, and it makes us acquainted with the uses, objects, and abuses of these powers. They are all endowed with inherent activity, and when excited, the feelings give forth their suggestions and impulses, often uncalled for by the will, and without guidance from the understanding. They often conflict in their desires; who has not experienced emotions of anger contending against the dictates of conscience and the understanding; emotions of self-love warring with those of benevolence and justice; emotions of fear and shame paralyzing not only the aspirations of ambition but the clear dictates of duty? In short, which of us in youth, and on his first entrance into society, has not been perplexed, nay, perhaps tormented, by the conflicting emotions which poured like a torrent into his mind, and which he could neither analyze, control, nor comprehend. An early, a full, and a practical instruction in phrenology would remove, or greatly lessen, these embarrassments, by rendering us familiar with the nature and objects and proper spheres of activity of each of our faculties. It would render us familiar with every aspect which the propensities could assume, and teach us

to subject them to the direction of the moral and intellectual powers.

"I do not mean to say that a *mere* knowledge of the names and uses of the organs would be attended with these advantages. Phrenology teaches us that the intellect is far inferior to the propensities and sentiments in impulsive energy, and that these must be *trained* to obedience by long practice and discipline before virtuous conduct can be insured; and it is such a course of training to which I allude. That any science which should communicate, both to the teacher and to the scholar, precise and sound information concerning the nature, objects, and spheres of action of each of the faculties to be trained, and of the subordination of the propensities to the moral sentiments, would greatly facilitate the process of training, and also that of instructing, cannot admit of a doubt; and such a science, in my apprehension, is phrenology.

"I am far from wishing to insinuate that phrenology will enable each of us individuals, or every teacher, to change human nature, and to render every mental manifestation virtuous or proper in the children under his control; but, as I have elsewhere observed, there are degrees of comparison—good, better, best, and bad, worse, worst,—and all we pretend to accomplish is, to make the good better, and the worst less bad.

"Another use to which phrenology may be applied, is the selection of domestic servants and of persons to fill confidential situations. The idea of applying it in this manner excites a smile, perhaps of derision, in those to whom it is new; but to me, who have acted on it for fifteen years, it is not only a serious, but a very advantageous, reality. Let me remark, however, that wherever skilled labour is wanted, phrenology is not an index to its possession. It reveals only what capacities nature has bestowed, but does not tell to what extent they have been cultivated. If we wish to employ a book-keeper, we must ascertain by inquiries whether he has been taught to keep books. If we wish to hire a cook, we must learn, by the same means, whether the individual has been instructed in cookery. But phrenology will enable us to discover whether the candidate for employment has received from nature strong or weak animal propensities, strong or weak moral sentiments, strong or weak intellectual faculties; whether an indolent or active disposition; and these items of information are very difficult to be accurately obtained by any other means. I repeat, that for fifteen years I have practised the examination of the heads of servants applying

for admission into my own family, and with the happiest results. By selecting those in whom the moral and intellectual organs predominated, not only have I derived the benefit of being surrounded by persons whose morality and capacity have seldom failed me, but also, they have lived in harmony with each other, and a moral sunshine has pervaded the whole domestic circle.

"One vice, however, common in this country has baffled our skill; I allude to the tendency to intoxication. We have no external indication of the existence of this habit, for it depends not on any primitive faculty or organ, but on evil training and constitutional peculiarities. Where it exists, it oversets the whole order of nature in the subordination of the propensities to the moral sentiments. I have been under the painful necessity of dismissing, in fifteen years, on account of habits of intoxication, two male and one female servant, whose moral organs were fully developed. The men had no vice except that of inebriety; but the female servant (in whom Alimentiveness, Destructiveness, and Secretiveness were large, surmounted, however, by a good intellect, large Benevolence, Veneration, and Love of Approbation, with pretty fair, although not large, Conscientiousness), when intoxicated stole and lied almost involuntarily. I say almost involuntarily, for her thefts were often of things of which she had little need, such as quarter loaves, and a few pounds of ground rice, and articles of a similar nature, all allied to the gratification of Alimentiveness, although she was amply supplied with nutritive and agreeable food. In the same condition, she denied self-evident facts, and perverted truth even when it was favourable to herself. My supposition was, that the intoxicating liquor paralyzed the action of the moral and intellectual faculties, which have organs of smaller dimensions than those of the propensities, and that the latter, when left without guidance and illumination, acted as it were mechanically.

"Moreover, this case shows that, in my estimation, the propensities are not naturally and essentially evil. In this woman the organs of several of them were large; but as she had also large organs of the intellectual faculties, and of most of the moral sentiments, I did not hesitate to engage her. If she had been sober in her habits, and properly trained, I have no doubt that she would have been capable of directing the large organs of the propensities to good . . . .

"We sometimes hear the remark made in society that phrenology is given up by many of its votaries and makes no progress; in short, that it has already sunk, or is fast sinking, into

oblivion. The expression of this notion springs from the secret desire that it should be true; but I cannot offer the opponents any such consolation. The circulation of the *Phrenological Journal* is at this moment larger than it ever has been before, since the date of the first and second numbers, which were largely bought from sheer curiosity. There are gentlemen present who, having extensive means of information will be able to speak, from their own knowledge and experience, on the active movement of phrenology in their social circles. The time was when I knew by name every acknowledged phrenologist in the British Empire; I do not now know probably one in fifty. I may, however, enumerate a few facts that show how the current flows. In the United States, an able and efficient monthly Phrenological Journal has nearly completed its second year, and lately boasted of a circulation of 1200 copies. The American press has recently produced the most valuable contribution to the natural history of man that the present century can boast of, namely, Dr Morton's work on the skulls of the native American Indians, compared with their mental qualities, which has already attracted attention in Europe. Dr Morton is now a phrenologist; he gives tables of phrenological measurements, and acknowledges, as the result of all his investigations, 'that there is a singular harmony between the mental character of the Indian and his cranial developments, as explained by phrenology.' Even Italy sends forth her testimony that phrenology has reached her shores. On my return from America in June last, I found awaiting me a little work entitled 'Memoirs regarding the Doctrine of Phrenology and other Sciences connected with it,'* by Dr Luigi Ferrarese, Professor of Medicine in Naples, read before the Royal Academy of Sciences in that city. It was published with full permission from the royal censor of the press. The censor in his report on the work certifies that it 'is very instructive and useful, and contains nothing offensive to religion or to the rights of kings.'

"If we look to the press in our own country for proof of the progress of phrenology, we discover satisfactory evidence of its diffusion. Novelists resort to it as a mine of material for the elucidation of character. Mrs Steward's recent tale, named 'The Interdict,' is really an exposition of phrenological principles, while the author of 'Timon, but not of Athens,' a work of great boldness, eloquence, and vigour, introduces his leading and most respectable character as a phrenologist,

* Memorie risguardanti la Dottrina Frenologica ed altre scienze che con essa hanno Stretto Rapporto; Napoli 1836.

and obviously makes him utter the sentiments entertained by himself. Bulwer and Lady Blessington endeavour to extract interest from phrenology in their writings. It is the foundation of many highly instructive articles in *Chambers's Edinburgh Journal*, and it obviously forms the basis of the philosophical remarks contained in Captain Maconochie's 'Australiana.' Again, the two leading medical journals of England, viz., the *Medico-Chirurgical Review* and the *Lancet* have long been favourable to our science; and we are now able to add the *British and Foreign Medical Review*, conducted by Dr Forbes, to the list of our friends. The two leading medical journals of the United States, viz., the *Select Medical Library*, edited by Dr Bell in Philadelphia, and the *Boston Medical and Surgical Journal*, edited by Dr J. T. V. Smith, are ranged on our side. The former has supported phrenology from its commencement, and the latter declared its adhesion to the cause during my stay in Boston, and continues to defend it. Professor Silliman's Journal, also, the best periodical devoted to physical science in the United States, has lately enrolled itself in our favour. In short, your time will not permit me to enumerate one-half of the evidence of its triumphant progress that might be adduced; but if I were allowed, in conclusion, to advert to my own works, I should say that the public continue to purchase them to an extent which leaves me no ground for even suspecting them of indifference to the science, but the reverse; and I presume that, buying, they read them. The translation of my 'System' into German and lately in Brussels into French, and its extensive circulation in the United States of America, indicate an increasing diffusion of the doctrines in these countries.

"As to the increasing application of phrenology, do we not know that the Lunatic Asylum at Montrose, the Crichton Asylum at Dumfries, and the great Asylum at Hanwell, near London, are placed under the management of Dr Poole, Dr Browne, and Dr Conolly respectively, all phrenologists? I found also the great Lunatic Asylum of the State of Massachusetts at Worcester, forty miles from Boston, in charge of Dr Woodward, a professed phrenologist, and there is only one opinion in that country of its excellence, and of the success of his treatment. The State of New York is now erecting a magnificent asylum for the insane, and I found phrenologists preparing to offer themselves as candidates for its direction, and founding on their phrenological skill as one and an important element in their qualifications.

"In the department of Criminal Jurisprudence, I may mention that the Honourable Joel Parker, Chief Justice of the Court of Common Pleas in the State of New Hampshire, in the United States, in his charge delivered to the grand jury in September 1838, on insanity, applied Phrenology to the subject. He recognised not only intellectual insanity, but added that 'the propensities and sentiments also may become deranged;' and among the diseases to which they are liable he included 'an irresistible propensity to steal,' 'an inordinate propensity to lying,' 'a morbid propensity to incendiarism,' and a 'morbid propensity to destroy.' Need I state to phrenologists that this is a recognition of the diseased action of Acquisitiveness, Secretiveness, and Destructiveness. The Chief Justice quotes, as his authorities for the views which he presents, among other works, the Reports of Dr Woodward, and Dr Ray's 'Medical Jurisprudence,' both productions of phrenologists. Dr Ray's work, allow me to add, is a valuable treatise on medical jurisprudence, in which he not only presents the lights of Phrenology to illuminate the subject, but condemns the lawyers of other countries for their blindness to its importance, and, among others, he censures the High Court of Justiciary of Scotland for their condemnation in 1832 of Howison, obviously a homicidal monomaniac. The editor of the *Law Journal* of Boston is an able and zealous phrenologist, and in his work advocates its application to criminal jurisprudence. I cannot boast of equal enlightenment among the lawyers of Britain; but if the world in general advance, it will be difficult for them to continue for ever in the rear of human knowledge.

"If we wish to discover evidence of the application of Phrenology in education, we shall find that Mr D'Orsey of Glasgow has shown its valuable results in his school, and has not feared to avow his obligations to the science, and to defend it. I could mention many other teachers who walk by its lights, but I limit myself to a few. The Institution for the Blind in Boston is ably conducted by Dr Howe, a phrenologist, who has actually printed in raised letters an 'Outline' of the science, which he teaches to his pupils. The Asylum for the Blind in New York is managed by a phrenological author and lecturer, Mr Jones; and the prize-essay of the Central Society of Education in London was presented to Mr Lalor, who acknowledges, in explicit terms, the obligations of education to Phrenology. The secretary to the Board of

Education in Massachusetts, the Hon. Horace Mann, uses phrenology as a lamp to his path, in his admirable efforts to advance the education of the people. . .

"As there may be now present some who are only about to commence their studies in phrenology, I would respectfully but earnestly recommend to them to begin if possible by acquiring a knowledge of the anatomy of the brain, and of its connection with the nervous system in general, especially through the medium of the spinal marrow. This knowledge lays a sure foundation for the subsequent superstructure of phrenology. It renders many phenomena clear and intelligible which otherwise will be involved in obscurity in the student's mind. It enables him also to meet with success innumerable objections which medical men who are hostile to the science never fail to propound to those disciples who are ignorant of cerebral and cranial anatomy.

"In the next place, I recommend to the student to learn the local situations of the organs, and to practise manipulation until he becomes capable of estimating their relative development. To do this with success, let him first ascertain the general size of the skull by callipers, next the proportions of the different regions by the means directed in the books on the science. Let him next write down, as heads of columns, the *relative proportions* of these organs, and then, under the head of the 'propensities,' set down the size of each organ of propensity, estimating its proportion to the other organs of the propensities. Let him do the same with the organs of the moral sentiments, and with those of the intellectual faculties. Let him thus estimate the size of every organ from No. 1 to No. 35 in regular succession. In doing so, he should take the aid of the marked skull. Let him lay aside for a week the skull on which he has made this experiment, and, without looking at his notes, repeat the estimate of the size of each organ, and then compare the two estimates, and use his best powers of discrimination to determine which is the more correct. If he will proceed repeating these experiments on numerous skulls, then on busts, and lastly on living heads, he will become a well grounded phrenologist, and in time arrive at the most forcible conviction of the truth of the science.

"I have often mentioned that it was only after committing innumerable blunders, and practising extensive observations for three years, that I arrived at a full perception of the truth and importance of Dr Gall's discovery. Those who proceed by what is called 'testing' phrenology, and by observing one or two organs only at a time, such as the organs of tune and

language, appear to me to be merely throwing stumbling blocks in their own way. The study of the metaphysics of the science should come last in order, as being the most difficult portion of it; and no opinion should be admitted from metaphysical considerations alone. Facts in nature are the only certain foundations on which science can rest.

"Finally, I respectfully recommend to the student to make himself familiar with the collections of skulls and casts that are now to be found in every phrenological museum, and also to bestow due attention on the works which have been published in elucidation of the subject. When he has followed these rules, he may claim a place as a scientific phrenologist along with other scientific men; but, if he take up phrenology merely as a pastime, as a system of divination, or as a topic for wrangling and disputation, he must not be surprised if the votaries of other sciences look on him with contempt, and true phrenologists regard him with sorrow."

The meetings of the Association occupied a week; and papers were read on the following subjects:—"On the Functions of an Organ between Philoprogenitiveness and Self-Esteem," by Dr Kennedy, Ashby-de-la-Zouche; An Account, written by Mr Deville, London, of his Phrenological Collection, which numbered over 2400 casts; "On a case of Insanity," by Dr Epps; "On the Effects of Moral Training," by Mr James Simpson; "On Education in connection with Phrenology," by Mr D. G. Goyder; and many cases of various mental manifestations were brought forward. All these were discussed by the members; and although there was much diversity of opinion in regard to details, there was a general concurrence in the fundamental principles by which phrenologists estimated mental phenomena. During the week Combe on one day, in the absence of Dr Hunter, dissected two brains which had been prepared for the purpose by Dr Weir; on another day he gave an exposition of the Temperaments; and on the evening of the 23d, he delivered a lecture of an hour and a half's duration on the characteristics of nations in connection with the different forms and sizes of national crania, illustrated by the plates in Dr Morton's "Crania Americana" and numerous

specimens. The hall was crowded by an audience of 600, and many who wished to attend were unable to obtain admission.

The arrangements for the meeting of the Association had been made by an active local committee, namely, Messrs James McClelland, R. S. Cunliff, A. J. D. D'Orsey (High School); and Dr Robert Hunter, professor of anatomy in the Andersonian University; Dr Hutcheson, Dr Maxwell, and Dr Weir. To their exertions the success of the meeting was entirely due, for unfortunately the London phrenologists did not co-operate so cordially as they had been expected to do. The next meeting of the Association was appointed to take place in London in June 1841. Dr Combe had been prevented from attending by ill health, and his absence formed the one important blank in the ranks of the members.

On his return to Gorgie, Combe completed the revision of the "Moral Philosophy," and the work was published on the first October. The edition consisted of 1000 copies at 7s. 6d. each; and although no review of it appeared except in the *Scotsman* and the *Westminster Review* (the latter called the author a monomaniac), yet 600 copies were sold before the end of December; and in April of the following year a second edition had to be prepared. He was asked why he did not send copies to the reviewers, and he answered:—"I have discovered by experience that the public buy my books without any notice from the periodicals. Every year my publisher's accounts show a gratifying sale of my works, and I feel, therefore, independent of foreign aid. You will not be surprised, then, that I feel an aversion to present my books to reviewers to afford them fresh opportunities of indulging their own Self-esteem at my expense." He did not, however, escape the critics, for in the *Edinburgh Review* of January 1842 appeared an article entitled "Phrenological Ethics," which entered into a minute examination of the "Moral Philosophy." The article was attributed to Sir William Hamilton, and the

tone of it was very different from that of Dr Gordon in 1815 and Lord Jeffrey in 1826 in dealing with Phrenology.* The author was treated with respect, and the substantial merits of his works admitted. This done, the article, which extended to thirty-eight pages of the *Review*, proceeded to show that the pretensions of the phrenologists to the discovery of a new philosophy were absurd. The argument presented the best and most acute reasoning on the anti-phrenological side that had yet appeared, although the writer occasionally indulged in palpable logical quibbles. More respectful in manner, it was quite as severe in condemnation of the science and its philosophy as the articles of 1815 and 1826,—with the great difference that the writer in this case employed argument instead of vituperation. Combe was abroad when the article appeared, and found no opportunity of reading it until September 1842, when, in ill health, he was taking the waters at Franzens-bad. He wrote in his journal, 20th September of that year:—

"I have to-day finished a second and very deliberate perusal of Sir William Hamilton's article on my "Moral Philosophy," I shall profit by it in correcting some expressions in a new edition of the work; but beyond this it is worthless."

He was not only ready to profit by the arguments of others, but in all his work he sought the opinions of those whose

* We beg it may be distinctly understood that in speaking freely of Phrenology, and of Mr Combe as the high priest of its doctrines, we have not the very slightest intention of treating him disrespectfully as a man, or a member of society. On the contrary, we well know and sincerely respect his worth, his abilities, his untiring activity of mind, and his humane and liberal principles. But our regard for the individual must not be allowed to restrain our right of pronouncing judgment, in such terms as we think merited, upon his doctrines —a right of the exercise of which it would be peculiarly inconsistent and ungraceful of him to complain, seeing no one has ever more largely and freely exercised it, even with respect to men whom the world generally revere as lights and ornaments of their species. . . . Mr Combe's style, so far as regards mere verbal perspicuity, is not liable to exception: that is to say, his combinations of words are, at least, always intelligible. There is no affectation, no flagrant innovation in the use of terms, no attempts to pass off mysticism or obscurity for profundity. Everything he writes is marked with the most perfect simplicity, both of purpose and of manner."—*Edinburgh Review*, No. CL. January 1842, pages 376 and 378.

judgment he valued, and he did not hesitate to adopt their views if convinced that he had been in error, or had expressed himself in a way which might cause any misapprehension of his meaning. Whilst he was preparing the second edition of the "Moral Philosophy" and the new edition of the "Constitution of Man"—the stereotype plates being completely worn out by repeated printings—Dr W. B. Hodgson (at that time principal of the Liverpool Mechanics' Institute, now Professor of Political Economy in the University of Edinburgh), wrote objecting to Combe's declaration of the supremacy of the intellect and moral sentiments. Dr Hodgson said:—

"To the supremacy of the Intellect and Moral sentiments, or to the supremacy of any of the faculties, Sidney Smith and I have long objected; the brain is a republic, not an oligarchy, much less a despotism. The intellect and moral sentiments are just as liable to abuse as the propensities; all must go together and work together. As I expressed it in one of my lectures, 'the true man is like the best musician; the best musician is not he who plays best upon one string of his instrument, but he who can extract melody from each of the strings, and harmony from all.' The intellect being the storehouse of experience, does in some measure act as a guide; the moral feelings in the present state of society can scarcely be too highly cultivated."

Combe at once acknowledged that Mr Hodgson had supplied him with valuable suggestions, to which he would give effect in the new editions. He also formally expressed his thanks to Mr Hewett C. Watson for other amendments which enabled him to define more clearly than before his theory of the action of the propensities, sentiments, and intellect. He briefly explained the alterations thus:

"1. The propensities exist and have their legitimate spheres of action; the sentiments the same; and intellect directs both. Virtue consists in actions conform to *all* the faculties, acting in harmonious combination and fully enlightened. The moral sentiments and intellect could not, for instance, without Philoprogenitiveness, enable a mother virtuously to discharge her

duty to her children, any more than Philoprogenitiveness could do so without them.

"2. But the moral sentiments and intellect are superior in kind to the propensities; and when conflict arises between them, the latter must yield, and the former command. This is the supremacy of the sentiments and intellect. In harmonious action, of course, these command and the propensities obey. Both of my works are written throughout *on this principle,* so that no alterations are necessary in the substance; but the view in 1. [the preceding paragraph] was not explicitly stated before. Indeed, many persons so read the books as to infer that I held the sentiments and intellect sufficient in *all cases,* without the aid of the propensities, to find the way to right—a proposition which is clearly untenable. The sentiments without destructiveness would not execute justice, if an offender were to suffer pain.

Having completed the English edition of the "Moral Philosophy," and seen it out of the printers' hands in October 1840, Combe had more time to bestow on the preparation of his "Notes on North America." As he was eager to have the book ready to be issued in spring, and had many arrangements to make in order to secure simultaneous publication in the United States, he declined all invitations to appear either in public or private during the winter. He was asked to lecture in various towns, and to address meetings of the working classes. This latter invitation was one which he refused with much regret, for, next to Phrenology, he took the deepest interest in contributing to the enlightenment of the people. He was hopeful, however, that his book would prove of more permanent service to them than any passing address which he could deliver; and he therefore held to his resolve not to move from his retirement until the task should be finished. It was even proposed by Sir W. C. Trevelyan that he should give a course of lectures in Edinburgh; to this he reiterated his determination not to lecture in the city again until the hostility to Phrenology had diminished.

As was his custom, he submitted the proofs of his new book to a few intimate friends, and amongst them Dr Patrick Neill, who,

in the Town Council, had proposed him for the chair of logic. His chief object in writing the book was to benefit his own countrymen, and to show them the advantages of perfect liberty of conscience in religious matters. Dr Neill took exception to the severity with which he spoke of Trinitarians in contrast with Unitarians; and to this he replied:—

"In regard to my remarks on the Trinitarians, I shall endeavour to explain what I mean. By the Reformation the right of private judgment in religious matters was established, and by the law of the United States it is enacted as the birthright of every citizen. The true character of Jesus Christ is a matter of interpretation of certain passages of Scripture. That these admit of doubt cannot be denied, because good and great men differ on them. The law which recognizes the right of each individual to follow the light of his own conscience on this and every other point of faith, guarantees him in the enjoyment of all his social principles whatever his conclusions may be. When the Trinitarian regards the opinions of the Unitarian as 'awfully impious,' and proceeds on this impression to dislike him as a man, and to obstruct his path in *secular* affairs, he arrogates to himself an attribute of superior judgment which the principles of the Reformation and the law of the land deny to him! He becomes a persecutor. The *fact* that he does so regard the Unitarian is no justification of his doing it. He must go back to first principles, and inquire who gave him the right, in a question with his neighbour, who is as wise and as sincere as himself, to decide a disputable point of faith, and to found on his own decision a feeling of 'awful impiety' against his neighbour, and to give effect to this feeling in *secular* affairs. I cannot discover a shadow of reason, of justice, or Christian humanity in such conduct. I offer no opinion on the question of who is right or who is wrong. All I contend for is, the right of every sect to receive Christian treatment from all other sects. It appears to me that your principles would justify Nero's burning of the Christians. Thus, Nero believed Jupiter to be a God. Peter and Paul denied that he was so. This must have appeared in Nero's eyes 'awful impiety,' and if we are entitled to dislike and injure our neighbours when we regard his religious opinions, although conscientiously entertained, as impious, where are we to stop? Nero in such circumstances only went further in persecution than the Trinitarians do, but *major aut minus non variat speciam.*

"Our countrymen seem to me to need to have their minds open to the practice of religious toleration. I became aware of this more strikingly after seeing the United States. If they condemn me for these expositions of their errors, I shall receive their condemnation only as another proof of their real need of instruction in Christian humanity and justice. If my printed works differ from these principles I shall be glad to correct them. If not, they embody views which I regard to be sound and useful, and I am prepared to sustain all the consequences of publishing them."

Dr Neill, although strictly orthodox, sympathised with the earnest spirit of reform which animated Combe; but he was anxious to prevent him from giving offence to the evangelical party, and thus limiting the usefulness of his book. He had again to suggest omission in the "Notes on America" (Vol. II., page 219), where Combe quoted the following case:—Dr Joseph Parrish, a physician of Philadelphia, a man of large benevolence, who had sacrificed much for the welfare of his fellow citizens, was a member of the sect called Hicksite Friends. A Presbyterian lady wrote to him imploring him to give up the "awful delusions" of his sect, and to become a Christian. Dr Parrish "wrote a reply characterised by Christian benignity in its most beautiful form." Dr Neill justified the lady in her zeal, and this was the answer:—

"There is a fundamental difference between your views of religious liberty and mine, which I am anxious to expound, that we may know exactly what we respectively mean. It lies in this. You say that the Calvinists regard the views of the Unitarians as 'awfully impious,' and that allowance should be made for their acting warmly and zealously against the Unitarians in temporal affairs, under the influence of this 'sacred horror;' on the contrary, I consider this feeling of 'awful impiety' and 'sacred horror' as unauthorized and in itself immoral; and I regard it as affording no better an apology for aberrations from Christian meekness and forbearance, than drunkenness or any other vice would furnish for such conduct. My opinion is founded on the following considerations.

faculties, the same means of judging what is right, and both are liable, and to the same extent, to error. Both have the Scriptures as their only acknowledged guide to salvation. Both, we may suppose, use these gifts with equal sincerity and assiduity. Both acknowledge the right of private judgment in interpreting the Scriptures. Both admit that difficulties exist in interpreting them, because they see good and wise men drawing different conclusions. The Calvinist infers that the Scriptures teach the divinity of Jesus Christ. The Unitarian concludes that they do not teach this doctrine. The Calvinist regards the Unitarian as denying his God. The Unitarian looks on the Calvinist as guilty of blasphemy, in ascribing the divine nature to a created being, and in paying him divine worship. The pious horror is as strong in the one mind as in the other, where both have been trained alike. Now, I regard this mutual dislike and disrespect as positively wrong and sinful in *both*, and I cannot respect it, although I may pity it. It is founded on an assumption of infallibility, and a foregone conclusion that the opposite party is irretrievably wrong; and such a condition of mind appears to me to be altogether unwarrantable in both.

"Entertain the supposition for one moment that the Calvinist may be in error, and I ask what follows? He first mistakes the true meaning of Scripture, and then he founds on his own error a justification of uncharitable and unchristian feelings towards his neighbour. Surely this is neither Christianity nor sound logic. The fault that I find with the Calvinists is that in a question with those who differ from them on this point, they will not admit the *possibility* of their being in error; in other words, they assume their own infallibility, the worst feature of popery. I do not say that they *are* wrong, because this is foreign to my object. I only say that they are as *liable* to be wrong as the Unitarians; and that the consciousness of this liability should induce them to dismiss these 'sacred horrors' as unbecoming, and substitute for them humility and charity.

"Your note of yesterday appears to me to imply (I beg your forgiveness for saying so) the very error which I am now condemning. You sympathise with the lady and do not admire Dr Parrish's views. This is all right. But you say, 'If the Doctor had seen a pretty young girl floating down a stream and ready to be drowned, he would not have pulled her out by the feet for fear of offending American delicacy about legs, you suppose.' To adopt your own simile, the case should be thus stated:—Dr Parrish and a young lady are both sitting on

the bank of a stream (eternity), into which both must enter, at some time or other. Both have the same book of directions for sounding it and passing safely; she is young, and so has had little time to study the directions. He is old, and has bestowed on them great attention. She has been taught, and her own studies have confirmed her in the opinion that it is safest to enter the stream in one way; he has come to the conclusion that it is safest to enter it in another. Both are equally destitute of experience. Meantime both have comfortable seats on the bank, and much to accomplish before descending into the waves. The Doctor would think the young woman officious who came and pulled him by the feet to drag him over to her point, assuring him that she knew the direction better than he, and that if he followed his own judgment he would perish. He also would have regarded himself as rude if he had laid hold of the young lady's feet, and, under pretence of compassionating *her* danger, had pulled her to his position. To give force to your simile, you must assume that the one party is in the river and perishing, and the other out of it on dry land. But the real fact is, that both are on the bank, and that neither has ever been in the stream, and that both have the identically same chart for navigating it, and both equal experience. I labour to impress my countrymen with these views, because I regard them as sound and Christian, and consider them as not generally understood, and scarcely at all acted on by serious persons."

The religious intolerance of his countrymen had caused him keen suffering and regret, but he took a hopeful view of the future, and twelve months after he had sent the letters quoted to Dr Neill, he addressed the following to Dr Channing:—

"I expect that there will be a great reaction in England and Scotland in favour of free inquiry and independent thinking in religion, as the result of antagonism against the present narrow-minded fanaticism which so largely pervades these lands. We may not live to see it, but I can discern the sowing of the seeds which are destined, with time, to germinate and ripen into religious liberty. Scotland never was honestly liberal. Her liberal divines were in a wrong position, and never ventured to avow liberality, or to give reasons for it. They preached and wrote under the hope, I presume, that advancing reason would insensibly destroy superstition; but

the French Revolution disgraced reason, and the people went back to their old standards. Now, a deeper spirit of inquiry is awakened, not among the clergy, but among a large portion of the middle classes. They are afraid yet to speak out, but I see their minds working, and time will produce fruit. The orthodox clergy and their adherents are forwarding this good without intending to do so. They continue their defiance of the Supreme Civil Court, and there are now several ministers deposed by the General Assembly, but protected in the exercise of their functions and enjoyment of their emoluments by the civil magistrate and civil law. The clergy lately refused the Lord's Supper to a poor man and his wife, because they had buried their child on a Sunday morning, although the father and all the funeral company proceeded from the grave to the church and heard the services. They lately imprisoned a man in Edinburgh for selling a pennyworth of sweetmeats, during divine service, to a boy. The man afterwards prosecuted the committing magistrate for false imprisonment, and obtained £10 to drop the action. These are specimens of occurrences happening in Scotland, and they are stirring up many people to decern a spiritual tyranny instead of a love of souls as the real character of the present state of the clerical mind."

Combe received from other quarters unpleasant comments upon his work, although the objections were founded on different grounds from those of Dr Neill. The proofs were regularly forwarded to America, and read by Horace Mann, Dr Howe, of the Boston Asylum for the Blind, Dr Boardman, the editor of Combe's lectures in the United States, and the American edition of the work was entrusted to Dr John Bell, Philadelphia. The two gentlemen first named were so much disappointed by the early parts of the book that they urged Combe not to publish it at all, but to take time and write a more philosophical account of his sojurn in the States. He had used his journals freely in the preparation of the work, and they considered the result too desultory, and unworthy of the reputation of the author of the "Constitution of Man." He had sent the proofs out "with fear and trembling," knowing that they contained much which would be unpleasant to

the Americans; but this condemnation of his whole work by two men who were not influenced by any petty prejudices disturbed him more than any storm of miscellaneous criticism could have done. He had adopted the journal form because, he said, "I find it impossible to write in any other, for my materials are so desultory; and it is a journal of opinions rather than of travels and personal description." He knew that the frequent allusion to Phrenology would militate against its popularity, but it would serve the cause which had induced him to cross the Atlantic. Mr Mann's remarks so far influenced him that he submitted the work to his brother—who was always a severe critic towards him—and to two literary friends, with the determination that if they reported adversely he would sacrifice the whole edition of 1000 copies and suppress the work. These friends, however, expressed their conviction that the book would be useful to his countrymen, and as it was for them he chiefly wrote he was satisfied. This he stated to his American friends, and was gratified to learn that the third volume, and especially the address to the American people, obtained from them enthusiastic approbation. The work was published on 1st March 1841; it started with a fair sale, and Combe had no occasion to regret its appearance. As he had anticipated, the book attracted much attention in Edinburgh, the *Scotsman* being the first journal to speak boldly in its favour. He sent out no copies for review, except to the editor of *Tait's Magazine*, who asked for it, and to the *Spectator* voluntarily; it was criticised in the former with a fair measure of praise and blame—the blame being for the most part applied to his phrenological theories, and the praise to his observations of men and things,—in the latter with high commendation; and in the *Edinburgh Review* it was bracketted with the American travels of Mr J. S. Buckingham, which appeared two months later.

Whilst writing the "Notes," Combe stated his conviction,

from experience of the people and country, that such a periodical as *Chambers's Journal* would be of great value to the Americans. He informed the late Dr Robert Chambers of this idea, and elicited from him the following interesting letter:—

"EDINBURGH, 17*th December* 1840.

"I heartily join you in thinking a journal like ours highly desirable in the United States, but it may not be easy to establish one. I have understood that the cheapness of the newspapers, the publication of such sheets in every small place, each with attractions of its own, and the practice of filling up their spare columns with huge extracts from British periodicals, form obstacles to the establishment in America of such an organ as *Chambers's Journal.* There is another difficulty which, I fear, I shall not be able to speak of with candour without some appearance of egotism, or perhaps downright vanity, unless you have already assured yourself that I have in reality an inordinate share of that feeling. Every periodical work of miscellaneous literature, in order to succeed, requires at least one constant writer to give it a strong and abiding character. You will observe, for instance, how *Blackwood's Magazine* has taken a tone from the brilliant though irregular genius of Wilson, how the *Scotsman* has throughout a tone of firm and clear thinking from the excellent intellect of our friend Mr Maclaren. Without this, a mere assemblage of papers drawn up by various writers tells poorly on the public mind. When a periodical has such a presiding spirit, it may be said to form a friendship with every one of its readers. They get into the habit of communing weekly or monthly with that mind, and look forward to the recurrence of the work as they would to a visit of some intimate acquaintance or friend. This, above all things, constitutes the success of a periodical work. Now this is an advantage which the *Journal* always had. I might give you a minute history of the rise and progress of the work—how it was commenced in February 1832, being the first cheap weekly sheet in which any original literature was given; how it attained a sale of 25,000 in Scotland at the first, and soon after was sold to an equal amount in England; how the sale, afterwards decreasing slightly in Scotland but increasing in England, finally became what it now is, about 70,000 weekly, inclusive of sales of old numbers. I might even give printing and publishing calculations, but all this, I fear, would be little

to the purpose; for, after all, the literary strength was, in the case of the *Journal*, a matter of accident. Certain principles on which the *Journal* has been conducted might be followed with some negative benefits—as its keeping clear of religious and political controversy, its observance of the nicest decorum in language and ideas, and its mingling instruction only to a certain tolerable amount with entertainment. But these would only be like the power of sitting on a horse as a basis for equestrian feats like those of Ducrow. Some individual with a rather uncommon assemblage of qualifications would still be required to devote himself to the work, to throw himself into it body and soul, and to go on with it for years with untiring perseverance. It is in the first place difficult to find the man of such qualifications, and in the second difficult to find such a man disengaged from other pursuits on which he is grounding his hopes of success in life. If such a man do exist in America (don't be startled at the phrase), it would be a noble thing for him to devote himself to such a task, contenting himself to moralize a great nation, while his literary compeers regarded him perhaps as only conducting the best of the 'cheap periodicals,' and as not of course worthy to be mentioned in the same day with themselves. I hope, my dear sir, you will not misjudge these observations, uttered in friendly confidence. There are very few besides yourself to whom I would disclose so much; and it seems necessary that I should speak thus plainly in order to answer your request satisfactorily."

Horace Mann's suggestion that he should write a philosophical survey of the American people took possession of Combe for a few weeks; but he abandoned the idea, for, as he remarked, he was now over fifty years of age, and he was eager to give all his time to the propagation of his philosophy of the brain. On one point, however, he was determined to set all personal considerations aside, —that was to make the British public aware of the importance of Mr Mann's labours in education. Friendship, as well as his interest in the subject, actuated him; and having read Mr Mann's latest reports to the Massachusetts Board of Education, he declared that he would write an article upon them if he should "sit up all night to do it"—a very glaring infringement of the "laws." He did write the article just

before his departure for Germany, without sitting up all night, and Mr Macvey Napier accepted it for the *Edinburgh Review.* This was a source of much gratification to Combe and to Mr Mann, and it had the effect of drawing direct attention to the labours of the latter, which were unknown in this country, and very poorly appreciated in his own at that time; for he had many difficulties to contend with in carrying out his schemes, and much ignorant opposition on the score of expense to overcome.

It should be mentioned that Mrs Combe, like her husband, kept a journal during their residence in America, in which she noted many domestic and characteristic details of manners and customs. Her journal extended to nearly 500 closely-written quarto pages, and indicated literary industry which proved useful to Combe, for he quoted from her pages on several occasions in completing his work. She wrote frequently with a simple directness, conveying a clear view of people, and the circumstances in which she was placed; but the general tone is that of one who was conscious of the probability that the public might one day read what was written. This self-consciousness detracts from the value of her notes, although the volume as a whole elicits respect and admiration. She had suffered considerably from ill health in America, and the severe weather during the winter of 1840–41* did not tend to improve her condition; so that Combe was eager to complete his task and proceed to Germany, where he hoped the change of scene and interests would restore his wife to health. Besides, he believed that in Germany he would find a fertile field for the sowing of the seeds of Phrenology, and he laboured earnestly to acquire sufficient command of the German language to be able to speak in it to the people.

Although he lived in busy retirement, one subject impressed itself more and more upon his mind—the difference between

* The thermometer was once as low as 12°, and often at 16° and 18° Fahr.

the condition of the masses in his own country and those of America; at the same time he saw the dawn of improvement.

"In returning home I was grieved to see the squalid, starved, careworn aspect of my countrymen," he wrote to a friend in the States, "compared with yours, but hope that things may mend with them. Hitherto the poor in Scotland have been subsisted in the country parishes by assessments imposed by the landowners on themselves; they have judged of the sums which the poor shall receive, and, of course, of those which they themselves shall pay, without control by any court of law. It is now discovered that they starve the poor, who in consequence emigrate into the large towns, where there is a larger provision for them; but there the burden has become so oppressive that the provision has been diminished to the most scanty means of subsistence; and very extensive epidemic fevers have broken out in them, sweeping away the poor in thousands, and involving no small portion of the rich in their train. It is now seen that the natural laws punish the rich for their inhumanity to the poor; and public attention is strongly drawn to the necessity of an improved provision for them. I pointed out all this in my lectures on 'Moral Philosophy' in 1835; but the clergy then preached against me, and the citizens abused me. Nevertheless, the very doctrines advocated in my lectures on the causes of pauperism and crime are now supported by men of great influence and consideration; among others Professor Alison takes the lead." (Professor Alison was one of his most energetic opponents when Combe offered himself as a candidate for the chair of logic.)

Mr Hewett C. Watson had conducted the *Phrenological Journal* for three years, and it has been already seen (page 80) that he was not satisfied with the result. Combe agreed to repay him the sum of £100 for the copyright; and the number for January 1841 was issued by the original proprietor, and again under the editorship of Mr Robert Cox, who had returned from Liverpool and settled in Edinburgh. Mr Cox possessed the best qualities for an editor, extensive knowledge of his subject, and a quiet perseverance in whatever task he

undertook, which in after years enabled him to produce the "Literature of the Sabbath Question"—a compendium of all that had been written on it by scholars, theologians, and miscellaneous writers from the earliest to the latest times. The exhaustive examination of the Scriptures revealed in this work affords ample proof of his intellectual culture and energy. He took up the *Journal* again with some hesitation, for he knew the difficulties he would have to encounter when he had to produce it unaided by a regular staff of paid contributors. His interest in Phrenology and affection for his uncle, however, overcame all objections, and he resumed the post of editor. In doing so, he stated to the readers that his object would be "the promotion of truth and the explosion of error, by whomsoever taught and by whomsoever opposed." He was aware of the dissensions amongst the phrenologists, which he, with Combe, believed to be inevitable in this as in every other subject of inquiry, because the organisations of men differed and presented various motives of action to each. He desired to represent no party of Phrenologists, and would be glad to see the errors of all parties refuted, for, he said—"Phrenology we, in common with its best-informed adherents, regard as still incomplete; and we shall consider it our duty to aid in the removal of imperfections wherever they exist, as well as to advocate those departments of the science—and, in our opinion, they are of no small extent—which seem to be well ascertained and established."

Mr Cox also acted as secretary to the Edinburgh Phrenological Society, and conservator of the museum. Combe had sold the Clyde Street Hall, and the Society had been obliged to find new premises for the collection of casts and skulls. This was easily accomplished, but it was not until 1877 that a thoroughly fitting place was found for them, when in the the new buildings erected by the Henderson trustees in Chambers' Street, a hall was provided for the Phrenological Museum.

The example of Mr Henderson in proving his faith in the new philosophy by the testamentary destination of his funds, was followed by Dr James Roberton, Paris. Dr Roberton was a native of Hamilton, Lanarkshire, who had practised as a physician in Paris for more than a quarter of a century. He was acquainted with Dr Combe, and he had corresponded with George on Phrenological subjects. He was a friend of Sir G. S. Mackenzie, and had told him in several letters that he intended to leave his money for the benefit of Phrenology. He died in 1840, leaving legacies to various persons and institutions, and making the Edinburgh Phrenological Society heir to the residue of his estate, which was calculated to amount to about £15,000. He appointed Dr Robert Verity, Physician to the English Embassy, Paris, his executor. Dr Verity, after realising the principal part of the estate, visited Edinburgh with a view to investigate the position of the Phrenological Society. He professed himself dissatisfied because the Society was not "incorporated," and proposed a compromise, by which he personally should benefit to the extent of one-third of Dr Roberton's money; but this was against the terms of the will, and the wishes of the testator as expressed in private letters. The compromise was declined, and Dr Verity returned to Paris. The members of the Phrenological Society thereupon raised a fund amongst themselves, and prosecuted their claim in the French courts of law. The case proceeded from court to court; there was no question as to the justice of the case, but a purely technical difficulty intervened. Dr Roberton, although so long resident in Paris, had never obtained letters of naturalization; he was therefore in the eyes of the law still a foreigner; Dr Verity was in the same position. Eventually, in 1847, the last court of appeal in France decided that the French courts had no jurisdiction in the disposition of the fortune of a foreigner, and therefore could not interfere to adjust the difficulties between Dr Verity and Dr Roberton's legatees. At the same time the French law enabled Dr

Verity, as executor, to take possession of Dr Roberton's estate. As Dr Verity had no visible property in England, the English courts of justice had no power of control over him. A petition representing the case was presented to Lord Palmerston; by him it was handed to the law officers of the Crown, and nothing more was heard of it. Thus by a strange perversion of justice the Phrenological Society was deprived of a valuable legacy. In the prosecution of this lawsuit, extending over six years, Dr Combe expended £220; George, £100; their fellow members were also losers, and the result was in every respect disappointing, although they had obtained the best legal advice in Scotland and in France. The decision was made known when Dr Combe was near his death, and it was the cause of considerable regret to him.* George was impatient with whatever appeared to be unjust; Andrew, whilst holding his ground with quiet firmness to the last, when the final stake was played, turned calmly to the future, and endeavoured to bring about amendment in the conditions which permitted errors to be perpetrated.

Combe's life at Gorgie Cottage in the spring of 1841 was disturbed by the illness of his brother Andrew, who was again seized with hæmoptysis, and by the death of his sister, Mrs Cox, which occurred on the 11th February, in her 62d year. Mrs Cox was the widow of Mr Robert Cox of Gorgie Mill, who died in 1815; and the calm trustfulness with which her husband had met death was repeated in her own person. She thought of every one, desired that her children and relatives should not mourn long for her, but make her happy by being happy in themselves; she wanted no "douce faces" about her, and she desired that after her funeral they should all dine in her house. Between Mrs Cox and Dr Combe there had been a close attachment, formed when he had grown to manhood, for she had been married when he was between four and five

* See Life of Andrew Combe, pp. 509–515.

years old. She had nursed him in his illness, and he had been frequently her guest at Gorgie. Her loss would have been a severe blow to him but that he expected his own end to come so soon that he only prayed it might be as calm and painless as hers. Combe, writing of these events says, speaking of Mrs Cox :—

"She, like the rest of us, was educated in stern Calvinism, and she was the last to embrace the more liberal views of the new philosophy. We were afraid that when her brain was weakened by disease, her old impressions might revive and give her pain, but it has not been so. She knew that she was dying, and in clear and oft-repeated terms assured her family that she was happy in mind and free from pain in body, and that she relied on the benevolence of God with the most heartfelt assurance. She repeatedly said that she had no idea that she could be so happy in dying. We rejoice that she is suffering so little; and in my view, after the duties of life are discharged, and the organs worn out, death, if it come with little pain, is no evil to be deprecated.

"At the time of this affliction, my brother, Dr Combe, was seized with an affection of his lungs, which alarmed us a good deal, for he has been three times on the brink of the grave with consumption; but by judicious treatment and care the symptoms are removed, and he is not alarmed himself that any farther evil will ensue."

The Doctor's illness at one time was so critical that Combe proposed to abandon his journey to Germany, but Andrew insisted that he should go for Mrs Combe's sake, believing that he would be able to communicate with him in time, should any fatal issue be imminent. In that event the Doctor wished to have his brother with him, believing that his presence would be a satisfaction to themselves and a relief to the other members of the family. Writing at a later date, when George proposed to return to him from Germany, Andrew said—

"Were I to become worse, and begin to take the road down

hill, it would be a great comfort to have you near me, as from sympathy of feeling, thought, and pursuit, as well as natural affection and old association, your society is most valuable to me, especially in time of need. At present, however, thank Heaven, I see no adequate reason to require any such sacrifice on your part, and think you should carry out your own plans for the winter (1841–2) without reference to me."

Combe having assured himself that there was no immediate danger to his brother, made his arrangements for his departure to Germany. He had been subject to many pleasant and unpleasant experiences during his stay at Gorgie Cottage. Amongst the former were the visits of several American friends, notably Mrs Lucretia Mott and her husband. He had to endure amongst the unpleasant experiences another severe condemnation of the "Constitution of Man" in *Fraser's Magazine.* This, however, was ably answered in the *Spectator* by Mr M. B. Sampson, whom he had first met in America. Mr Sampson was at that time engaged in the Bank of England, but also wrote articles for the various liberal magazines and reviews, and subsequently became the city editor of the *Times.* He was a phrenologist, and cordially entered into Combe's suggestion that the science should be applied in judging of the fitness of those who asked for assistance and guarantees from the new "Guarantee Society," which was established in London about this time for the purpose of ensuring employers against the defalcation of clerks and other servants. On this subject Combe wrote an article for the fourth meeting of the Phrenological Association, held in London in June 1841, and Mr Sampson read it, stating that the directors of the "Guarantee Society" had agreed to adopt the principles laid down in the paper. Combe was not sorry that circumstances rendered it impossible for him to attend this meeting of the Association, because the dissensions amongst the London phrenologists had increased, and he regarded the successful carrying out of the scheme as almost hopeless. He wrote

to several of the members urging them to show unanimity in their general arrangements, however much they might disagree in detail. He also recorded his vote in favour of Dr Elliotson as president. This was a mark of his honest desire that the science should prosper, apart from all personal considerations, for Dr Elliotson was opposed to him, not only in opinions, but had made statements regarding him which called forth the list of sales and accounts of the "Constitution of Man," given on a previous page. But the meeting of the Association proved to be more unpleasant than he imagined it could be. Dr W. C. Engledue, of Portsmouth, delivered the introductory address, and made the statement that "Materialism constitutes the only true and rational basis of Phrenology." To the most thoughtful phrenologists this was a new and startling proposition; those who were present instantly protested against it, and the protest was speedily followed by the resignations of Dr John Forbes, Sir G. S. Mackenzie, Sir William Baynes, Mr Serjeant Adams, and many others, who formed nearly two-thirds of the Association.

From all these disagreements Combe was glad to escape, and on 19th May 1841 he and Mrs Combe sailed in the "Glen Albyn" from Leith to Hull, whence they sailed on the evening of the 22d for Hamburg. At the latter place he found Herr Bower Kleeft, who sold in his shop "Stucco figures, fish sauces, Windsor soap, and needles." He had made the acquaintance of this shopkeeper on a former visit, and again he inquired of him how his phrenological busts sold. He received the same answer as before—"Hamburg sleeps on Phrenology." Combe was not surprised; five years ago the subject was almost unknown in the country, and no teacher had arisen to direct attention to it. As he advanced into Germany he found everywhere the same stagnation; but despite the serious difficulties which stood between him and the task he was about to attempt, his hope grew stronger that in the course of a year he might be able to induce a few thinking men to study the

science, and through them the minds of rulers and people might be aroused to a sense of its importance. It was a remarkable circumstance that Phrenology was less known in the land of its birth than in any other civilized country, and the causes of this, which Combe discovered in 1837, still existed.

At Bremen the Combes remained for a few days as the guests of Dr Hirschfeld, the translator of the "System" into German. Having bought a carriage in order to be able to travel more at leisure, they proceeded by easy stages through Hanover, Frankfort, Wiesbaden, and Coblenz to Godesberg, about four miles from Bonn. Here they determined to rest, and to begin the serious study of the language. A teacher was engaged, with whom they studied for two hours on three days of the week, besides diligently reading and writing German every morning. After a month's experience Combe confessed that he found the language very difficult, and he was no longer young. But he saw the humorous side of the difficulties too.

"The only perceptible progress which I have made," he said, "is exactly like that which Adam and Eve made when they ate the forbidden fruit. When we came here, we spoke right on, altogether unconscious of blunders; we were so thoroughly ignorant that we did not know good from evil in German grammar. Now we know enough to be conscious of innumerable and often ludicrous sins. I lately, by mistaking one letter in a word, desired the landlord to *ham* the waiter, wishing him to send him; by an error in a gender, I desired the servant to open the *fool* instead of the door, and I very gravely told a friend that a *slice* of Scotland is still inhabited by Celts! Mrs Combe studies along with me, and in all our pursuits we go harmoniously together."

His experiences in America led him to compare, more closely than he had hitherto done, the institutions of an autocratic government and that of a republic; and his conviction became stronger than ever that the great benefit of self-government

was to quicken all the faculties into action. He found the German peasantry jogging along in their old habits and modes of cultivation of the soil, and improvement marching at a snail's pace. The consequence was that German agriculture was many years behind that of Scotland or America. But, he said, "from their large intellect, and coronal organs, I am certain that the Germans would make a better use of free institutions than either the Americans or English have done, and by and by they will obtain them. We perceive despotism relaxed, and social improvement advanced since 1837. Steamboats and railroads are breaking the despot's chains." The Prussian Government especially obtained his admiration, for it was unceasing in its efforts to enlighten the people, and everywhere on the Rhine were excellent new school-houses, built or in course of building. Under the sway of Prussia the people were relieved from all trouble in governing; and were it not that, in consequence, the faculties became stagnant, or expended their energies in abstract speculations or mere poetry, song, and art, he was half disposed to think that this was an advantage compared with the turmoil in which politics kept society in free countries. "But the means of producing mental energy and activity without the privilege of self-action in the highest field of life are not yet discovered." These ideas formed the germ of the pamphlet which he subsequently wrote on the condition of Germany. He had not yet, however, conceived the work, but with his customary habits of observation he was accumulating facts and thoughts which were regularly entered in his journal. It was one of the most remarkable traits of his character that wherever he went, and amongst whatever people he might move, he found materials for grave speculation and comment.

After spending three pleasant and busy months at Godesberg, the Combes posted to Mannheim, where they arrived on the 20th September (1841). They engaged a suite of apartments for six months, made arrangements with another tutor

to aid them in prosecuting the study of German, and were settling down to improve and enjoy the winter, when letters of a most distressing nature were received from Sir James Clark and Dr Combe. The former with all the kindliness which sincere friendship could inspire, communicated the intelligence that after a minute examination of Dr Combe's chest, he found the lungs so much diseased that he could hold out no hopes of recovery. Dr (now Sir James) Coxe who was the bearer of this letter, confirmed its statements. Dr Combe himself wrote, in the full consciousness of his own condition, with calm resignation to the will of Providence, grateful that he had been able to accomplish so much, although there were many things he would still have liked to do, and grateful for the comforts by which he was surrounded. At present, however, the disease was moving at such a slow pace that he did not wish George to alter his plans.

The tidings cast a gloom over Combe, for Andrew was to him "like a son, a brother, and an invaluable friend." He desired the agent to find another tenant for the house in Mannheim, and proposed to return to Edinburgh immediately. But Andrew, who knew how ardently George had set his mind upon lecturing in Germany, wrote again urging him to pursue the course previously decided on, and telling him that he would feel distressed by causing him to abandon his project unless the danger became more imminent. The calmness and firmness of the doctor's letters encouraged Combe in the hope which had been growing upon him, that his brother would again rally as he had done after the two former serious attacks (1820–22 and 1831–32), and be yet spared to them for some years. It was therefore decided that the Combes should remain in Mannheim during the winter, and proceed with the preparation of the lectures in German. At the same time the brothers were sensible of the precarious conditions of Andrew's existence. George directed his attention to various matters relative to their early training, and the philosophy they had

adopted, and in reply Dr Combe wrote the series of admirable autobiographical letters, which were subsequently published in the memoir of his life. In the course of this correspondence George Combe revealed much of his own character, and although the leading ideas are embodied in the fragment of autobiography which opens this work, the following illustrations are interesting. An observation he had made regarding the family tombstone caused Andrew to comment on his brother's love of posthumous fame. George answered:—

"You are right in saying that the love of posthumous fame was with me an early and a strong feeling; in fact it was an instinct. When I was still a child, I used in bed to imagine myself doing something great and good, and acquiring the admiration and love of the good, and I have cried at the pictures of goodness and greatness which my fancy bodied forth. The feeling was strengthened when I became able to read the works of good men. I loved and admired them so much that I felt my desires increased to be so loved and admired by other men when I was no more. All this was before I knew phrenology and the natural laws. The knowledge which these brought to my mind convinced me that Self-Esteem and Love of Approbation were the fountains of these wishes. They were, however, always combined with the moral sentiments, and I am not ashamed of them, although I now see that they were illusions. So much of them remains with me still that, as I enjoyed great pleasure from contemplating the virtues of other men, and received many impulses to good from their works, I should be happy to be the means of affording similar enjoyments and advantages to others. But in my whole life since I became a phrenologist, I have never done, consciously, any act, or written a single sentence from the love of fame as my inspiring motive. I thank Phrenology for having placed me at once, and I hope for ever, in the region of the moral sentiments. It is from the conviction that

some future youth, in whom talent and virtuous dispositions live, but still undeveloped, may receive a quickening and salutary impulse, in strolling in the churchyard, by reading your name and mine on a stone that I think such an indication of our resting-place should exist. A stone perishes in a century, but by that time our work will be finished, and no adventitious impulses will be needed. If we have written salutary truths, and unfolded the ways of God to man, they will be deeply ingrained in the literature of the country within a century; if we have not, our names will have perished before the monument decays."

Andrew reminded him of sundry imperfections in his character, and he replied :—

"To have moved in the world as I did, amidst the hourly conflicts of selfishness and passion, and to have been on no occasion betrayed into mental manifestations that were not noble and becoming would have been superhuman. To the ordinary feelings of humanity I plead guilty with all humility; but in all my designs and deliberate actions, my conscience is clear of having intended or approved of wrong. I had a vivid picture before me, in childhood and youth, of the evils of poverty, for our excellent parents suffered many bitter pangs under the apprehension that they should never be able to provide for their excessively numerous family. This early gave me appreciation of the value of money. Again, in reading the lives of distinguished men, I was often pained and mortified by their want of prudence and common-sense, and by the miseries and degradations into which the poverty consequent on these failings precipitated them. I early resolved, therefore, to do my endeavour to avoid these faults."

But whilst he was actuated by these principles of prudence, benevolence and justice were Combe's guides throughout life. In his profession he protected the interests of his clients, not only by dissuading them from litigation, but also by his careful management of their affairs when they were involved in it,

and by voluntarily resigning large portions of his legitimate charges. For some years after he began business the rendering of his accounts was a source of pain to him, and he would have been glad if his position would have permitted him to gratify Benevolence and Love of Approbation by dispensing with payment altogether. The public auditor of legal accounts once observed that his office might be abolished if all practitioners would state their claims with the same accuracy and consideration as Combe.

The difference between the natures of the brothers is indicated in the following extract from one of George's letters :—

"You possess more sympathy and softness of character than has fallen to my share. I never could sympathise with feebleness and imbecility; with power, energy, and self-sustaining greatness I had a natural and profound fellow-feeling. The impulse of my mind was not to help and encourage the feeble, but to take possession of them, and do for them, and occasion no further trouble either to themselves or their friends. You far surpass me in your capacity of exercising a benign and beneficial influence over this class of persons. It is the result of your organisation, and my want of it is the consequence of mine. If your place and mine had been changed—that is to say, if you had been nine years older than I, and had been placed in the van of the battle, would the result have been the same as it has been? I believe not. My stoical qualities and unbending strength gave me power to face the world arrayed against the truth, and, perhaps, also afforded a support to your modesty, without which you might not have ventured to develope your own capacities so early or so well. I have often longed for more softness and flexibility of character, but all things are not given to one."

There was another trait in his own character the meaning of which was not quite clear to him :—"With a moral abhor-

rence of war, I have long experienced a deep interest in the generalship of war. I read the descriptions of Napoleon's Italian campaigns and of others with a degree of pleasure like that of discovering new truths. I lost sight of the *individuals*, and saw mass impelled against mass, and traced the causes of victory partly in the moral condition and partly in the physical arrangements of the masses. I saw mind trampling over intellectual incapacity. From my own feelings I can understand Napoleon's state of mind in looking on war. It was the conscious and intelligent exercise of a vast power to overcome difficulties and attain contemplated results; and it required a strong effort of my moral nature to escape from the fascination which his great capacity imposed on so many other minds." He could only attribute this interest in the strategy of campaigning to the pleasure which he experienced in seeing a multiplicity of causes skilfully combined to produce a given result; and he supposed that Self-Esteem, Love of Approbation, and Firmness were called into activity. He refers to this warlike spirit in his Autobiography. When a boy, he delighted in witnessing the discharge of cannon at Edinburgh Castle in celebration of the victories of the British arms.

Regarding the philosophy to which, in their different ways, they had devoted their lives, Dr Combe observed :— "I dare say many good men, with their present lights, would look upon your estimate and mine of the value of the truths we try to diffuse as ludicrously extravagant, and indicating only morbidly active Self-Esteem. But it may be truly said that in placing faith in the principles we advocate, we place faith in God's beneficent laws, and not in our own feeble faculties." * Commenting on this, George wrote :—

"Your remark on the light in which our estimate of the

* Life of Andrew Combe, M.D., p. 406.

value of the truths which we have developed must appear to other men, unacquainted with the facts on which they rest, is most correct; but I feel with you that we have acted the part only of the man who manages the show. We have lifted the curtain and described the objects behind it, but these objects are the workmanship of an Almighty hand: it is *His* might which is operative in them and through them. In fact I often regard myself (and it is the true light) as part of the apparatus which He made for pulling the strings that are destined to lift the curtain. He made us, and assigned to us our office, and, from first to last, the work is His. Wherever we have substituted our own errors or imaginations for true descriptions of His scenes we are powerless; but wherever we have unveiled any one of His principles of action, Omnipotence will bring forth the fruits."

In the course of this correspondence, Combe mentioned that he had frequently thought that he would, when his energies became unequal to the public advocacy of phrenology, finish his labours by writing an autobiography. He regarded the idea of death with as much calmness and resignation as the Doctor displayed in thinking of the same subject, and both had the feeling that they were most ready to die when most happy.

Meanwhile the life in Mannheim was one of alternate exhilaration and depression, according as the reports which each succeeding post brought of Dr Combe's health were favourable or the reverse. The German studies were pursued with ardour, and the translation of the lectures into that language was begun. This was a laborious task: the matter was selected from the "System" and the English lectures, and arranged in such a manner as Combe thought would present the best view of the subject to the German mind. Then his teacher (Herr Beil) dictated, and Combe wrote in large bold penmanship the text of his discourses in their new dress. He had acquired by this time sufficient command of the language

to be able on occasions to suggest improvements in the translation. When his teacher left him he carefully studied the manuscript, reading it aloud slowly and frequently. In this process of familiarising his eyes with the forms of the words, and his ears with the sounds, he was materially assisted by a young advocate of Mannheim, Gustave Von Struve. This gentleman was an enthusiastic student of phrenology; he had read the "Constitution of Man," and the "System," and entertained a profound admiration for their author. He had an active temperament, and entered warmly into the project of awakening his countrymen to a due appreciation of the new philosophy. He had an earnest conviction that complete success was sure to attend the effort; and at times when Combe was faltering and doubting, Von Struve's enthusiasm sustained him in the resolve to persevere to the end. In March 1842 the introductory lecture was read, as a rehearsal, to a few friends, who assured Combe that his pronunciation was not only perfectly intelligible but effective. Thus encouraged, he proceeded with his task with renewed vigour. When he had completed half a dozen of the lectures, he went to Heidelberg with Von Struve, and was presented to the professor of law, Mittermaier, and to the professor of surgery, Chelius. He was received with cordiality; Combe's labours and the progress of phrenology in Britain being known to Professor Mittermaier through an Italian work by Luigi Farrarese, M.D. All the Heidelberg professors, with the exception of Tiedemann, approved of the proposed course of lectures, and the use of a hall in the University was immediately granted by the senatus. Accordingly, a collection of casts was ordered to to be despatched from Edinburgh, and it was arranged that the lectures should begin in May.

Combe was living in a state of cerebral excitement of a more dangerous character than he was willing to believe. He had several warnings: his digestion suffered, and he had slight attacks of an internal malady from which, in after

years, he endured severe pain. He took brief excursions with his wife, regulated his diet; and then renewed his labour. But towards the end of March he received intelligence that Dr Combe had relapsed into a condition which gave reason for serious alarm. Combe felt prostrated, and incapable of any intellectual effort whilst the anxiety about his brother continued. He thought he could neither do justice to his audience nor his subject in his present state, and once more he resolved to return to Edinburgh. Another letter, however, brought the welcome news from the Doctor himself that he was again comparatively safe, stating that he meditated a voyage, and—in ignorance of George's health—reiterating the desire that he should not abandon his project now that it was so near being accomplished. This advice was adopted; for Combe's strength revived on the receipt of the Doctor's letter. A prospectus was prepared and printed, with a list of the works on Phrenology which had been published in Britain, on the Continent, and in America; and the length of the list surprised the German professors. Advertisements announcing the first lecture for the evening of the 11th May were inserted in the newspapers, and on the 29th April the Combes removed to Heidelberg.

The course was to comprise twenty-two lectures, with one practical lesson on the Temperaments, and nineteen of them were ready before the end of May. The fee for the course was fixed at five florins (8s. 4d.), as he desired to enable the students to attend without taxing their purses too much; and he would have made it three florins, had not the authorities of the University objected. The introductory lecture was the only one of the series which was an entirely new composition; it gave an account of the progress of Phrenology in other countries, and of its applications, and ascribed the honour of its discovery to Germany. It was delivered, as arranged, on the 11th May, and there were 70 hearers, among whom were the professors of the University, the president of the Baden

Supreme Court of Justice, and other men of intellectual position. Combe felt that he commanded the same close attention which he had done when speaking in English; and Professor Chelius, congratulating him on his success, told him that this was the only instance known of an Englishman attempting to lecture in German in Heidelberg. The second lecture was attended by 50 persons, and for the remainder of the course his regular audience numbered 40; of these, 26 were subscribers, and this was considered a large class for lectures, the attendance on which was not compulsory. The professor of Logic, Freiherr von Reichlin-Meldegg, had only seven students, including Combe, who entered himself for the course, and was punctual in his attendance, until the state of his health interfered.

He was all this time reading and writing entirely in German, and he began to feel the strain upon his mental powers so severe that he doubted the possibility of his being able to continue to lecture in that language. He had arrived at his eleventh lecture, when the pain from which he suffered became so acute that, to relieve Mrs Combe's anxiety, he sent for Dr Chelius, who said that all the professors were similarly affected; that his general health was unimpaired, and would not suffer. With this reassurance he persevered to the end, and in doing so he displayed the moral courage and firmness with which he was endowed as much as on any occasion in his life. From the morning until within an hour, sometimes half an hour, of the time to begin his lectures, he lay on the couch in pain; then he would rise and walk to the University; there the excitement attending his task relieved him of suffering for the moment. He was unable to write his remaining lectures; but he dictated the English to Mrs Combe; then the teacher dictated the German to her, and Combe read from her manuscript. He improved slightly in the course of a week; but he continued to find his work heavy, and mental application always followed by a degree of pain. The attack began early

in June. On the 22d July he delivered his last lecture, and on the following day he wrote to Dr Combe :—

HEIDELBERG, *Saturday*, 23*d July* 1842.

"My dear Doctor,—My lectures are finished satisfactorily, and I am well, and Cecy is so much restored in her health and spirits, that she has been pronounced by Harriet St Leger and Dorothy Wilson, who have paid us a visit, to be looking quite like her former self. This will give you pleasure, and now I shall tell you some particulars. Chelius, Nægele, Mittermaier, Roller, and Spengel, all professors, attended regularly to the end : Mittermaier never missed one lecture. At the close they voted an address of thanks, which, last night, was presented by a deputation, and it was accompanied by a portfolio of engravings of the town, inscribed as 'A memorial from his friends in Heidelberg to George Combe!' Mittermaier was spokesman. A few days ago, Tiedemann called and thanked me for some copies of my casts [of national skulls] which I had presented to him, and offered me casts of any of his collection. He was not only polite, but kind and respectful, so that although he has not attended one lecture, he has heard enough to make him respect me, at least as an individual. Mittermaier, in his lectures on Criminal Law, has repeatedly introduced Phrenology in illustration of his principles, and strongly recommended it to his pupils as necessary to be studied in relation to their profession. Both himself and his students have told me this. He took hold of me fourteen days ago, and shook me by both hands, and thanked me for the useful knowledge I had communicated to him. Yesterday Chelius called and told me that he had felt that I had in my lectures described his own feelings and faculties as accurately as if I had possessed his own consciousness. This, he said, gave him the conviction that I was speaking from nature, and not from fancy.

"Now, my dear Doctor, that this task is ended, and well ended, I must say that you are a very wise man, and that it *has* tried my powers to their utmost limit, and that I will not venture such an undertaking again. When I wrote to you on 10th June, I really felt quite well; but the next day I ate too many cherries, and had very considerable mental labour for three or four days afterwards. My illness returned; I was laid on the sofa in so much pain and nervous excitement, that I could not even hear the *Scotsman* read without great suffering. I had deep breathings, and my nerves tingled to the

ends of my fingers, which once lost sensation, as if the tips of them had been covered by soft leather. At night my system was so quiet that I could always lecture without pain, but I suffered in walking to the college. Cecy was desperately frightened, but acted nobly. Now I am so nearly well that I eat, sleep, and walk without uneasiness. I walk five or six miles a day, and have done so for a fortnight. I never felt the magnitude of my efforts till now that they are over, and this is my only apology for having engaged in them. I feel as if I had been carrying Mount Atlas on my shoulders, and had now laid it down. I have written 500 folio pages in German, or nearly so, in less than six months—dictated, however, for I never or rarely tried original German composition. This seemed no task; but when I began to lecture, and required to read *every word*, even to the description of the peculiarities of every cast, my anxiety became great lest I should not be understood. Then there was no response; my audience listened and steadily attended, but no one spoke to me about the lectures, or seemed to take any interest in them. I felt as if I were lecturing to a dead wall. Only my firmness of character and Von Struve's constant assistance and assurances that I was making an impression could have carried me through, especially when I spent the whole day, from 8 A.M. to 4 or 5 P.M., in pain, incapable even of thinking, and stretched on the sofa. Strange to say, the excitement of the pain kept me all that time from feeling the least despondency or disappointment, and the hours flew off with surprising rapidity. It was not agony, only that uneasiness which became intolerable when I *thought*. It was exactly what was wanted to arrest me in my course of over-mental exertion; and I often admired the goodness of God in making the pain come when the danger was approaching, and in sending a regular augmentation of it exactly proportionate to my attempts at transgression. I do not know what other people may think of my effort, but it seems to myself so small that my sufferings appear to me an indication of my own decay rather than of its greatness, and in this view I mean to profit by them in future. Tiedemann told me that at this time he suffers exactly as I described myself to do, and that he has congestion of the abdominal veins with great pain on every mental effort.

"Excuse this long detail about myself, but you are my guardian angel, and I must conceal no part of my transgressions from you. We did not tell you sooner, as the news would have distressed you, and done us no good. I made

decided progress in German during the lectures, and if I were now to remain other six months, and mingle in society, I could speak it tolerably. We continue our intention of going to Munich, Ischl, Ratisbon, and then to Dresden, Leipzig, Hamburg, and Hull. I shall send my casts to Dresden, so that if every circumstance shall be favourable, it may be in my power to lecture there next summer. . . . My nerves have tingled since I wrote the words, 'Lecture in Dresden next summer!' so you may conceive that at present I have no appetite for such work. But Cecy says truly, that as now everything is written, and I am conscious of power to lecture, it would not be a task of the same magnitude merely to *read* the lectures, and that I should not prematurely resolve to sacrifice all my labours and sufferings when the fruits of them could be reaped without injury. There is sense in this, but I shall be guided by your advice and future circumstances in regard to the completion of this plan. Meantime it is certain that we pass the winter in Edinburgh."

The memory of all he had been suffering was fresh at the time the foregoing was written, and even then the ambition to secure a firm footing for Phrenology in Germany by his own exertions was not abandoned. The hope lingered in his mind for several years, although in the summer of 1843 he was compelled by his health to postpone any further attempt, and ultimately he was obliged to resign the idea entirely. Had strength been granted to him there can be no doubt that he would have accomplished a large measure of his desires in this respect, for he was endowed with the indomitable perseverance which does not know failure. The address presented to him by the members of the Heidelberg University shows that he had the power to attract the serious attention of men whose intellect and professions qualified them to judge of his capacities and the merits of his work.* One curious proof of

* The following is Von Struve's translation of the address :—

"Sir,—Nearly forty years have passed away since Dr Gall withdrew from Germany, and with him departed from among us the doctrine of which he had laid the foundation. You have the merit of having brought it back to its home in that state of improvement which it has reached, in the meantime, in

awakening interest in Phrenology was afforded by the theft from the Aula Gallerie of two marked skulls and one marked bust.

Leaving Heidelberg on the 30th July, the Combes travelled

foreign countries.* For this, please to accept our warm and cordial thanks. We know how to appreciate the sacrifices you have made to us and to science, and the labour which it has cost you to address us in our own language. Even from the first, our attention was rivetted by your lectures. A science, the aim of which is to fathom the depths of the mind, and to unfold to practical observation the instruments by means of which it acts in this material world, is calculated in itself to command the attention of every thinking man; but much more has it been interesting to us when we were favoured by hearing your lectures, which bore so clearly and explicitly the stamp of scientific gravity, deep conviction, and most persevering zeal. May the seed which you have scattered produce a rich crop. The fruits which a science yields are the best proofs of its value. May they grow in brightest beauty on the tree which you have again planted amongst us; and may you not forget, in your distant fatherland, your scholars at Heidelberg, for we shall always keep you and your interesting lectures in vivid remembrance. Heidelberg, the 22d July 1842."

This was signed by Professor Mittermaier—who, besides his duties in the University, had written much on criminal legislation, was active in politics, and was several times President of the Baden Reichsrath,—Dr M. J. Chelius, professor of clinical surgery, physician to the Dowager-Duchess of Baden, and eminent as an operator on the eye; Dr Nægele, professor of midwifery; Dr Roller, physician of the Baden Lunatic Asylum; Spengel, professor of rhetoric; Dr Thomas Bischoff, professor of physiology; and Jolly, professor of experimental philosophy and mechanics. The address was also subscribed by Count Wartensleben, Von Struve, etc. The following is a translation of Combe's reply:—

"Gentlemen,—I beg leave to express my heartfelt gratitude for the honour which you have done me in the address now delivered. Deeply embarrassed as I have been with the difficulties of lecturing in a foreign language, and anxious as I have felt lest, by the imperfections of my exposition of phrenology, I should injure in your eyes the cause which I was desirous to advance, your kind and favourable appreciation of my efforts has afforded me the highest gratification. Allow me to add, however, that greatly as I esteem this expression of your favourable opinion, you had previously afforded me another testimony of your respect which has been to me, if possible, still more agreeable. For I know that among my hearers have been men holding the first rank in the medical and legal sciences in this University, and capable, equally by their high talents and extensive attainments, of forming a sound judgment on every scientific topic presented to their consideration; men, also, so deeply engaged in the practical duties of their professions that they enjoy no leisure for trivial pursuits. When I have seen such men honouring my lectures night after night by their attendance, I have felt that by that attendance, extending over twenty-three evenings, they paid the most gratifying

* In 1840, Mr R. R. Noel lectured on Phrenology in German at Prague.

leisurely in the route they had decided, visiting various spas and several friends. From Ischl they made a number of pleasant excursions with their friends the Walters, and Lord and Lady Lansdowne; and they spent a few days at Reichenhall with Baron Tautphoeus,—the baroness being a niece of Major Edgeworth, with whom Combe had become acquainted on the occasion of his first visit to Dublin. But notwithstanding the pleasure he derived from agreeable society, fine scenery, and entire release from mental labour, Combe's strength had been too severely taxed to be speedily restored to a proper condition. He suffered repeated attacks of illness, and was obliged to rest at Franzensbad to drink the waters. Here he read Sir William Hamilton's review of his "Moral Philosophy," and here the ninth anniversary of his marriage day was passed. "It is impossible to realise in feeling that so long a period has elapsed since that event," was one of his annual comments upon these anniversaries. "I bless Providence for all I have enjoyed, and look forward with pleasing anticipations to some remaining years of happiness in the society of her who has shed so many beams of pleasure on the past." Three weeks at Franzensbad only served to make him feel much the same as he had done when he left Heidelberg; and it was resolved to hasten the journey homeward. Whilst resting at Dresden the agreeable information was conveyed to him that the "Constitution of Man" had been translated into Swedish by Mr Schwartz, and 1500 copies had been sold within a few weeks.

tribute that could have been given to the inherent interest and scientific character of Phrenology. Only the accordance of its principles with the dictates of reason and of physiological science, and the manifest utility of its applications, could have commanded that close and continued attention with which you have honoured me. From the interest, therefore, with which you have listened to my imperfect expositions, I anticipate that Germany will no longer neglect one of the noblest productions of her own genius; but that she will now hasten to appropriate to herself, in the eyes of Europe and America, the glory which she would lose by leaving to foreign nations the honour of appreciating and applying Gall's great discovery of the functions of the brain and of the philosophy of the human mind."

The Combes arrived in Edinburgh on the 24th October, and, according to previous arrangement, they established themselves for the winter in Dr Combe's house, 25 Rutland Street. The doctor had been advised to winter in Madeira, and left Edinburgh a week after his brother's arrival; but the week had afforded them opportunities for earnest and pleasant intercourse, and enabled the doctor to give George valuable counsel for the care of his health. The preparation of the fourth edition of the "Physiology of Digestion" had just been completed, and on the eve of his departure from Edinburgh, the doctor addressed to his brother an affectionate dedication of the work, the principal part of which should have a place here:—

"It is mainly to your advice and influence that I am indebted for perhaps the most valuable parts of my general and professional education, and consequently for all the advantages I have derived from them. It is to the example of your untiring zeal in the discovery and diffusion of useful truths, and in the cause of human improvement, that I owe much of the deep interest which I have long felt in similar pursuits. And, lastly, if this or any other of my published works has proved useful in diminishing the sum of human suffering, or in adding to the means of human enjoyment, it is in great measure to you that I owe the gratification of having been of some service to my fellow-men; for without your cheering encouragement to urge me on at the beginning, it is doubtful whether any one of my volumes would ever have been written."

On 31st October Combe made this memorandum in his journal:—"This day my dear brother left us, and sailed from Greenock on board of the *Hesperus* for Madeira. Twenty years ago I accompanied him to the same port when he sailed for Italy, and no friend of his hoped for his return, so desperate was his case then considered to be. May the same success reward his patience, skill, and submission on the present occasion. Our excellent niece, Miss [Marion] Cox, goes with him, a beautiful example of practical sense and goodness."

Soon after his return Combe was informed of the death of Dr Channing on 2d October at Bonnington in Vermont, and the news affected him deeply, for the American preacher had inspired him with profound admiration, and he had cherished the hope of renewing his personal intercourse with him in Europe. "A great light has been extinguished in him," he wrote, "and one of incalculable value to his countrymen. His high principle and unbending honesty were beacon lights to them and to the world." These are the last words written in his journal for 1842.

# CHAPTER IV.

1843–1844.—SIR JAMES CLARK'S WARNING—THE REPETITION OF THE LECTURES IN GERMAN FORBIDDEN—PHRENOLOGY AND CRIMINAL LEGISLATION—THE FIFTH EDITION OF THE "SYSTEM OF PHRENOLOGY"—MESMERISM—FACTS RECORDED AND FACTS OBSERVED—PROGRESS OF PHRENOLOGY—LIEBIG'S WORKS—THE DISRUPTION—EMS—RELIGION AND PAIN—ITALY—ITALIAN HEADS—MADAME CATALANI—LIFE IN ROME—"PHRENOLOGY APPLIED TO PAINTING AND SCULPTURE"—RAPHAEL'S SKULL AND DEVELOPMENT—CARDINAL MEZZOFANTI—ROMAN PRISONS—THE NEAPOLITANS—HEIDELBERG REVISITED—CLERMISTON—THE "VESTIGES OF CREATION"—THE EDUCATION OF THE PRINCE OF WALES.

"YOU are now upon the plateau of middle-life, and upon yourself mainly does it depend whether you continue to travel quietly along the level ground, or commence your descent, it may be, on rather a rough road." This was the warning which was addressed to Combe in a long letter of advice by Sir James Clark in the summer of 1843. During the winter and spring he had suffered from occasional attacks of illness, and in April he had undergone an operation performed by Professor Syme; but he was careful in all his habits, except in controlling his mental labour, and he did regulate even that to a certain extent, although not sufficiently; his nephew and niece, Robert and Robina Cox, who resided in the doctor's house, afforded him pleasant companionship, and were attentive to his comforts; he had as many opportunities for social enjoyment as he cared to indulge in, and his general health remained apparently good. This latter condition deceived himself, and to Mrs Combe's deep regret she found him, in spite of all that he had suffered at Heidelberg, not only thinking about repeating his German lectures

in Leipzig, but almost determined upon doing so, and seeking assistance in the necessary arrangements from Dr Hirschfeld, Von Struve, and Mr R. R. Noel. When Sir James Clark and Dr Combe received a full report of his condition from Drs Scott and Farquharson, who were attending him in Edinburgh, they wrote at once earnestly warning him that the lectures would be more than his strength would stand, and, as his medical advisers, peremptorily forbidding the attempt. Combe abandoned the project with great reluctance; he thought that as the lectures were ready, the worst of the battle was fought and won, and that the mere repetition of them would involve no risk to his health; but he found that the excitement produced by even moderate exercise of his faculties caused a relapse, and he therefore gave entire submission to the directions of his advisers. The summer was to be spent in Germany, where he was to try the effect of the mineral waters, and the winter in Italy. On his return he intended to settle permanently in Edinburgh, and with that object he purchased, for £2000, the house, 45 Melville Street, which continued to be his head-quarters during the rest of his life.

Although he could not work for more than two or three hours continuously without feeling ill effects in consequence, he was by no means idle; as he said, "by always doing a little I accomplish something." The first task to which he applied himself after he had settled down in his brother's house was the preparation of his correspondence with Professor Mittermaier on "the Application of Phrenology to Criminal Legislation," which appeared in the *Phrenological Journal* for January 1843. Professor Mittermaier was strongly of opinion that Phrenology would be a valuable assistant to criminal legislators in leading them to a judicious choice of the kinds of punishment adapted to the offenders; in teaching them how to produce the most beneficial impressions on all the organs which lead to virtuous conduct; in helping them to decide questions of responsibility; and in directing the arrangement

and administration of institutions for the punishment of crime. In his reply to the professor's questions regarding prison discipline in America, Combe gave a sketch of what he had observed of the "social system" as carried into effect in the prisons of New York and Massachusetts, and of the "solitary system" in the prisons of Pennsylvania and New Jersey. His views of the mental constitution of those persons who generally became criminals have been already explained; and in the two systems of dealing with them he found the radical defect that they did not provide sufficient means for strengthening the moral and intellectual faculties of the prisoners. The conclusions at which he arrived led him to suggest a scheme of prison discipline, which although, he admitted, of a Utopian character in some of its features, was based upon sound principles. His leading ideas were as follows: 1. That the criminal should be treated as a moral patient from the beginning. 2. That he should be sentenced to confinement in a penitentiary for an indefinite period of time, power to restore him to liberty being invested in government commissioners. 3. That he should be first subjected to solitary confinement, without occupation of any kind, until the mental depression of *ennui* forced him to ask for work as a relief from the monotony of his existence. He would thus be made most susceptible to moral and religious instruction, which should then be commenced and continued in solitude until repentance and the desire of reformation were produced. 4. In proportion to his improvement the moral faculties should be exercised by increasing degrees of liberty, and he should be allowed occasionally to leave the prison on parole before he was finally discharged. 5. During the whole period of confinement, seclusion during the night, and active labour during the day, should be combined with vigorous moral, intellectual, and religious cultivation. 6. The prisoners should be carefully classified, so that the more advanced might act as guides and examples to those

recently admitted, and their privileges curtailed for every breach of discipline. 7. The prisons should be remote from towns, but near a village, where, during their probationary period, the prisoners might hold regulated communication with the inhabitants. Until they had been brought to that state of mind in which they would not only give their pledge to return to the prison at a stated hour, but redeem it faithfully, he would not consider them fit to be restored to society. There were individuals whose moral and intellectual organs were so deficient in size in proportion to that of the propensities, that they might be found incapable of reformation. Such men he regarded as moral patients, and he would have them confined for life. The mistake of detaining a man who ought to be at large could not be easily made, for according to this plan the prisoner would always have it in his own power to determine by his conduct the period of his imprisonment.

"Finally," he said, "a practical knowledge of Phrenology on the part of the chief superintendent and directors of the institution would be of great advantage. By means of this science the natural dispositions and talents of each individual would be ascertained, much deception on the part of the criminals be prevented, and a steady and consistent direction be given to the efforts of all the persons employed in the institution."

The spirit of the ideas thus briefly indicated pervaded all that he wrote on the subject of criminal reform. He displayed humane consideration and pity for moral infirmity, and he sought the remedy in giving the patient healthy surroundings, in making him feel that his own comfort would be attained only by honest conduct, and in presenting to him the prospect of an honourable future. Captain Maconochie acted upon Combe's principles at Norfolk Island with success.

The chief occupation of this winter in Edinburgh was the revision of the "System of Phrenology" for its fifth edition.

Combe had been looking forward to this task, and had collected much new matter to insert, besides having written numerous amendments on almost every page. Dr Combe had suggested that the work should be divided into two parts, comprising—first, the Physiology of the Brain and its Applications; and, second, the Physiology of Mind and its Applications. Combe saw that such a division would give the treatise a more scientific character in the eyes of medical men than its original arrangement presented; but, on the other hand, it would tend to perpetuate "the pernicious habit of considering the brain by itself, and the mind by itself, when nature has made them, in this world, only one." He therefore rejected the suggestion, and adhered to his own plan. The fifth edition of the "System" was published in April 1843 in two volumes, making together nearly a thousand pages. The principal additions to the work consisted of new illustrations of the organ of Conscientiousness, a section on "Comparative Phrenology," and another on "Mesmeric Phrenology." The latter subject had been for some time attracting the attention not only of Phrenologists, but of the public generally. The most marvellous experiments were reported to Combe by gentlemen whose veracity was beyond question, several of whom were shrewd men of business, and the most unlikely persons to become easy victims to imposture. He received almost daily fresh accounts of the results of Mesmerism applied to the various organs of the brain, and at length he was obliged to exclaim "I must either reject all human testimony, or admit that there is truth in these phenomena." On principle he never discredited any phenomena merely because they were new and incomprehensible; but he approached this subject of Mesmeric-phrenology cautiously. He desired direct evidence from nature; and he cautioned those who were investigating the mystery to take care that the organ of Wonder did not deceive their eyes, and interfere with the accuracy of their

reports of what they witnessed. He attended experiments which were performed at the houses of friends, and afterwards in the drawing-room of 25 Rutland Street. He was unable to account for what he saw and heard; and he refrained from the expression of a decided opinion. It appeared to him, however, that there was no absurdity in the supposition that the nervous system of one individual might influence that of another through other channels than the senses. The cause of the mental excitement produced in a large assembly when addressed by a powerful orator was as great an enigma as that the brain should be excited by Mesmeric operations. But he had comparatively little interest in it as an aid to Phrenology; because any evidence it might afford was purely empirical, and never would have satisfied his mind without more solid grounds of conviction. It was calculated to impress the imagination, but not to carry philosophical conviction to a scientific mind.

In preparing the introduction to the "System" he had to encounter an objection which was raised by Mr H. C. Watson, Dr Forbes, editor of the *British and Foreign Medical Review*, and others, to the effect that the recorded facts of Phrenology were not sufficient to establish it as a science. To this he replied that the recorded facts bore only a small proportion to those *observed*. He deemed it sufficient to record characteristic cases; the multiplication of them would have been easy, but it could prove no more than was done by those already presented. Another of Mr Watson's remarks was that "much is included within Phrenology by its writers having authority, which is not shown to be true on such evidence as scientific men ordinarily feel bound to receive." He admitted this; but he maintained that "by far the greater part so included *is true*, and will *be found to be so* by those who appeal to Nature." He considered that the cause would be more rapidly advanced by soliciting inquirers to appeal personally to Nature than by phrenologists devoting themselves to the narration of cases;

and the great desideratum appeared to him to be to increase as much as possible the number of such inquirers. Professor Gregory was of Combe's opinion in regard to what had been done in order to prove the truth of the science, and wrote—

"True phrenologists have not omitted anything that can reasonably be required of a new science of observation. It has always appeared to me that a candid perusal of Gall's great work or of your 'System' is quite sufficient to produce conviction of the truth of Phrenology, while we see at the same time that the science is not perfect. But how could it be so? I could as soon doubt that chemistry is a science, because its theoretical views are often modified, as that Phrenology, with all its imperfections, is a true science—I will say an established science as far as its great, essential, leading principles and the greater part of its details."

The rupture which had occurred in the Phrenological Association did not cause so much direct injury to Phrenology as had been anticipated. Combe lamented the dissension and its origin, but he did not withdraw from membership, believing that his own position was too clearly defined for any one to identify him with Dr Engledue's theory. The public interest in the science was at this time receiving a stimulus from various quarters. Messrs W. & R. Chambers had issued, as Nos. 59 and 60 of their *Information for the People*, a brief outline of Phrenology, prepared for them by Mr James Simpson, the materials for which, and some of the illustrations, were taken from Combe's "System." The able editors, who have done so much for education and literature, in a brief introductory note, referred to the practice adopted by the conductors of cyclopædias of giving articles on Phrenology written by men who did not believe in it, and said: "We have resolved to eschew this practical absurdity by presenting a view of phrenology *by one who believes it to be the true system of mind.*"* There was also published a little work entitled

* "This we conceive to be a course the more necessary that Phrenology, overlooking altogether its organological basis, presents a far more intelligible view of the faculties of the human mind, and the phenomena of their working,

"Phrenology in the Family," which was dedicated to mothers, and its object was to show the utility of Phrenology in early domestic education. It was written by Joseph A. Warne, A.M., pastor of a Baptist church in Philadelphia, who was also the author of a work called "The Harmony between Phrenology and the Scriptures." A copy of the first-named book had been presented to Combe during his sojourn in America. On his return to Edinburgh he had lent it to a lady, Mrs Johanna Graham, to read. She found so much in it that she thought of the greatest value to mothers, that she circulated it amongst her friends, and soon a general request was presented to Combe to reprint the book here. This he agreed to do, but without adding a word of his own to the text. Mrs Graham, however, wrote a short preface for the English edition, signing herself "A Christian Mother," and the little book did good service to its readers and to Phrenology. The whole of the profits resulting from the sale were presented to the author, Mr Warne. In addition to these signs that the science was making its way amongst the people, there were a number of popular periodicals started in London to support Phrenology and Phreno-magnetism; but the *Zoist*, under the guidance of Dr Elliotson and Dr Engledue, was the only one which maintained its place for any length of time. A more satisfactory

than any of the metaphysical systems. It is eminently, we think, the system of mental philosophy for the unlearned man, because it is much less abstract than any other. In perusing the account which it gives of the mind and its parts, ordinary people feel for the first time in their attempts at psychological investigation that they have ground whereon to rest the soles of their feet. Thus, supposing that the observations made with regard to the connection of certain manifestations of thought and feeling with certain parts of the brain are untrue, there is still a distinct value in Phrenology as an extensively available means of studying mind. We deem it right, at the same time, to mention that Phrenology appears to us as beforehand likely to be true, in as far as it assigns a natural basis to mind; while we are equally sensible that its leading doctrines have acquired a title to a very respectful attention, from the support given to them by a vast amount of careful observation, and the strikingly enlightened and philanthropic aims for which many of its supporters have become remarkable."—*Information for the People: Phrenology.* W. & R. Chambers.

publication than any of these was the *Zeitschrift für Phrenologie,* edited by Gustav von Struve and Edward Hirschfeld, M.D. It was issued at Heidelberg, and was a gratifying proof of the effect which Combe's German lectures had produced. He hailed its appearance as an assurance that Gall's countrymen were at length roused to an appreciation of the new philosophy. The "Constitution of Man" continued to have a steady sale of 2500 copies a year, and it was in the course of publication in a Polish magazine, translated by two Polish gentlemen who were residing in Glasgow. These facts afforded him materials for pleasant reflection during a period of frequent depression and pain.

He had been reading Liebig's works on animal and agricultural chemistry, which had been sent to him by Professor Gregory, and referring to them (7th April 1843), he says:—

"You were right in your anticipation of the interest which I should find in these works. They realise admirably the spirit which, according to my notion, should pervade all scientific inquiries. Liebig looks at Nature as the workmanship of a superior Intelligence, addressed, and adapted to the lesser, but still reasoning and cause-appreciating, intelligence of man. He has strongly fortified the positions advocated in the 'Constitution of Man,' and I shall avail myself of his authority and of his facts in the next edition of that work which I may have occasion to print. His works will have a great effect as a model according to which other scientific men must observe, reflect, and write; they and my brother's books on physiology have conveyed more instruction to my mind than all the other books, aided by all the lectures which I have ever read and heard. You are quite correct also in saying that these works of Liebig's need more than one reading. With me they must have three perusals at the least, for I have a small memory for mere details, and still less for numbers; but I have understood and, I hope, appreciated them on the first study of them."

Phrenologically, it is a curious fact that Combe speaks on several occasions of his deficiency in regard to details; yet during his professional career as a Writer to the Signet, and

in all the affairs of his private and public life, he was most attentive to details. All his letters were duly docketed by his own hand; his receipts and expenditure, to the most trifling items, were carefully noted; the business of his numerous relatives which passed through his hands for advice, control, or assistance was attended to with as much precision as if they were clients to whom he would be required to render strict account. This may be attributed to Order, and he had that organ very large; but it is remarkable that he does not appear to have distinguished in himself between the memory of details and the capacity of attending to them. From this year (1843) there are few interruptions to the daily chronicle of his doings in his journals up till the day before his death.

This (1843) was the year of the Disruption. Combe was in Edinburgh at the time, but preparing for departure. He had watched the event approaching with mingled feelings of hope and doubt. He had expected a revolution in the Church, and he looked upon this as one of the first steps towards freedom of thought and action, but not from the same point of view as the founders of the Free Church. Writing to Dr Boardman, New York, he said:—

"On the 18th May the disputes of our Established Church reached their climax. The Rev. Dr David Welsh, the founder of the Phrenological Society, was on that date Moderator. He led off a secession from the Establishment of upwards of 400 ministers (out of about 1000), and among them are Dr Chalmers and the ablest divines of Scotland. These men abandon their provisions from the State and their station as Established clergymen, and must in future depend on their flocks, because the Supreme Civil Court controlled them in their attempt at setting up an independent power of legislation in ecclesiastical matters, in which also civil interests were involved. The pretension of these men, if allowed, would have brought Scotland back under a spiritual tyranny worse than the Catholic; but their secession will lead to religious freedom in a sense and form which they do not even dream of at present. I rejoice heartily in the event. I feared that

they would not have courage to make the sacrifice; but now I beg pardon for doubting them, and cry, Bravo! well done; go forward in the path of liberty, and prosper."

On the 29th May Dr Combe returned from Madeira much improved by his winter's residence there; and on the 4th June Mr and Mrs Combe proceeded to Ems, under strict injunctions that no serious mental occupation was to be indulged in for some months to come. But as he passed through the German towns in which there were picture galleries, Combe became an industrious visitor and art student. His faculties never stopped half way, and his interest in painting, which had been always considerable, now that he was debarred from his favourite studies, became an absorbing passion. He spent long days in the galleries of Germany, and afterwards in those of Italy, without any consciousness that he was expending his strength as fast as he gained it. Till the end of July he was, under medical advice, detained at Ems and Kissingen for the benefit of the waters. He then proceeded to Leipzig, where he met Mr Horace Mann who had come to Europe to study the Prussian system of education. They occupied several days in visiting schools, asylums, and prisons. But Combe's strength was not yet sufficient to enable him to keep pace with the nervous activity of his friend, whom he lectured about obeying "the laws," and cited his own case as an example of the consequences of disobedience. At Dresden Mr Mann had to visit the institutions he was interested in alone; but they were enabled to enjoy a pleasant three days' excursion in Saxon Switzerland together, which revived the happy memories of Cape Cottage. They separated at Dresden, Mr Mann to pursue his educational investigations, and Combe to travel by easy stages into Italy, through Bohemia and part of Austria.

The journey was in every way agreeable; excellent weather and beautiful scenery ;two halts at the residences of friends—Mr R. R. Noel and Baron Tautphœus,—and frequent encoun-

ters with others from far and near at the inns by the way. At Gemünden they met Mr Robert Cox and Mr William Ivory, whom they joined in several excursions. From Ischl Combe wrote to his brother in good spirits, and reported the following amusing incident:—

"I have the honour of being supposed to be like distinguished men. At Cincinnati I was taken for General Harrison, afterwards President. At Linz I went into a printshop, and finding, as I thought, that I had taken the wrong door, I vanished without uttering a word. I found that the door was the right one, and went back. The lady of the shop told Cecy that I had frightened her husband out of his wits: I was so exactly the image of Francis the late Emperor of Austria, that the goodman thought his spirit had made him a visit, and she was glad when I came back and showed that I was a being of flesh and blood! We have since seen a cast of the head of Francis, and the likeness is distinctly traceable: a long, lean face, big mouth, long, narrow nose, high forehead, and a sombre expression are found in both. He was a very *good* man, but no philosopher!"

Whilst resting at Nauders on the 18th September, he entered in his journal the following observations on the influence of health and disease on religious thought:—

"My health has now become so good that I have enjoyed the whole journey from Ischl to this place in the highest degree. I feel happy, and my moral perceptions are again all in harmony with the order of God's providence. I neither see in death anything different from what I have described in the 'Constitution of Man,' nor do I shrink from it personally as a serious evil. In spring and early summer, when brought low by suffering, my views of life were dark and gloomy, and of death painful and disagreeable. I believe that the mind is in the best condition to enjoy religion, and to experience true and sound religious emotions, when it is in the best health; and that no prospects of eternal felicity, no faith or assurances of salvation, will give feelings of hope, comfort, and happiness when the organization is in a state of nervous depression. The evangelical believer then doubts of his salvation. Jesus Christ himself, when brought into this condition, fell into despair, and exclaimed, 'My God, why hast Thou forsaken

me?' Viewing him, as the Unitarians do, as merely a Good Man, this exclamation, when one reverts to its organic cause, is extremely touching, as indicating how much he suffered. Viewing him, as the Trinitarians do, as actually one of the Persons of the Godhead, as Himself the Deity, and as conscious that in a few minutes he was to become again the ruler of the whole created universe, we see him, nevertheless, so completely overcome by the nervous depression which attends the close of long-continued acute suffering that his humanity sunk under his tortures, and his intellectual knowledge of his own true character and future condition was not sufficient to sustain even him against the doubts of God's goodness, engendered by his physical exhaustion and pain. What a lesson to the bigots in misinterpreting death-bed scenes! When the brain is left unaffected, the sinner dies full of hope; when it is worn out by pain, even Christ despaired, and died in despondency."

The sight of the river Inn flowing rapidly by, and looking exactly the same as it had done to him six years ago, suggested a long train of reflection on identity, leading him to this conclusion:—"The human being enjoys consciousness and memory; and how these are preserved whilst his substance changes is still an inexplicable mystery. This subsistence of the consciousness of identity and the phenomena of memory afford the strongest presumptions that I recollect against the inferences that the mind perishes with the brain; for if we cannot tell how consciousness of identity and memory are transferred from particle to particle of matter, we may assume that there is something, an unknown something, of which consciousness and memory are attributes, and which only uses the brain."

On leaving Germany after his third visit it was with his former feelings of esteem and attachment for the people confirmed and strengthened. "How rarely have we met an absurd German," he exclaimed. "I do not recollect having met with a German whose mind was narrow and enslaved, either politically or religiously,—I mean educated Germans." But having entered Italy by way of the Stelvio pass and the valley of the Valtelline, he discovered that he had come amongst

a people who did not promise to attract much of his esteem. The inns were dear and ill served; extortion on the part of innkeepers and postillions was the rule, and the traveller could only protect himself by resolute bargaining. At Varenna the Combes remained for four days, resting and enjoying the sunshine and the beauties of the Lake of Como as thoroughly as if this had been their honeymoon, and as if the enthusiasm of youth cast its bright halo around all they saw. It was their first visit to Italy, and Mrs Combe had long cherished a desire to see the country. The excursion had been promised to her after the return from America as a compensation for all the fatigues she had undergone in that experiment; then the Heidelberg experiment interfered, and she would have been disappointed again but for the peremptory orders of the doctors that her husband should for a time abandon his lectures. She had always found him difficult to move from the one object which engrossed his mind, but well pleased enough to go on when he had been started. It was one of the fortunate characteristics of his nature, that with all its seriousness he had a large capacity for pleasure, when duty did not stand in the way; and now, compelled to be idle, and with returning strength, he declared that for the first time in his life he was really "enjoying *otium*." Still he was observing, reflecting, learning, and laying up material for new work. So, at Milan, Genoa, Spezia, Lucca, Pisa, and Florence—at all of which places they paused,—he found his chief delight in studying pictures and sculpture. In the people he was struck by the absence of any distinctive features.

"I have scarcely been able to distinguish a *national* head and countenance since we entered Italy," he wrote to his brother from Florence, 17th October. "In Milan the brain is, on the whole, not large and not well proportioned; but so various are the forms and temperaments that it is difficult to characterise any as predominant. We saw far better heads in the pit of the Scala theatre than in the churches! In the portion of Sardinia between Pavia and Genoa, the head is

not so broad as in Milan and Austrian Lombardy; so far as we saw it, the moral region is better, and there is a softer and more intelligent expression in the countenance. In Genoa the forms and sizes again become various, but we saw many good female heads there. When we entered Modena, at Lavenza, an oval face, narrow head, higher coronal region, with frequent predominance of the knowing organs, again became prominent, accompanied by small features and a sharp nervous temperament. I have often heard you mention the loud talking of the Italians. We find it increase as we go south, and find the tones of the common people hard, harsh, and wild, indicating the excessive activity of the propensities. The Germans are not a noisy people, and their tones are far more pregnant with the softness of the moral sentiments. With all this we are enjoying 'our Italy' very much, and are grateful to you for encouraging us to persevere. My health is now better than I ever recollect it to have been. I now see and feel that you were quite right in saying that my nervous condition had been constantly low since I returned from America; but until I got out of the fog I did not perceive that I was in it."

The following will interest modern travellers in Italy:—

"Travelling is not so expensive in Italy as it had been represented to us. After all cheating and plundering, the posting with our light carriage has not, on an average, exceeded 1s. 2d. sterling per English mile. In most of the towns we have found good inns, a profusion of supply for dinner that was quite unnecessary, and the charges have been generally under 15s. a day for us both, for dinner, coffee in the evening, and breakfast. Wax lights and servants may be estimated at 4s. more—in all under one pound; and for this we have a handsome sitting-room and bedroom in most inns, and when we have only a bedroom the expense does not exceed 15s. or 16s. a day, servants included. In short, the style is as much superior to Germany as the expense; but the moral differences are incalculable. In Germany all the inmates of the hotel are satisfied, and you leave them amidst smiles, kind looks, kind words, and warm wishes for a happy journey. You long to come back to them, and feel certain of being received as a friend. In Italy one leaves a hotel amidst grumblings and dissatisfied countenances, and under so much irritation of feeling that one thanks God at getting

away from them, and a rough Christian would wish never to see them again except in hell fire."

Before leaving Florence they were introduced to Madame Catalani, who with her husband lived in a villa about three miles from the city. Combe described her thus :—

"She is now only 63, and is hale and unbroken. She is a noble creature; has a fine nervous-bilious temperament, with a mere shade of the lymphatic; a large head, large anterior lobe, and fine, large, massive coronal. She is all over quiet intellectual power, moral goodness, and single-mindedness. It was beautiful to see with what warmth and sincerity of affection she embraced Cecy as the daughter of the 'noble Siddons,' as she called her. Mrs Siddons and she were sincere friends and admirers of each other; both possessed great intellectual power, exquisite sensibility, with high moral worth. The husband of Madame C. is a good-natured, round-headed, shallow-looking little man."

At Florence, too, the Combes had their first, and, as they sincerely hoped, their last experience of an earthquake. About four o'clock in the morning Combe heard a strange hollow rumbling; the massive walls of the hotel shook as if they were rending asunder; then the floor quivered and the bed shook as if it had the ague. But although it had been one of the severest earthquakes which had occurred during the past four or five years, very little damage was done.

On the 29th October they arrived in Rome, without having encountered the banditti of whom Mrs Combe had been travelling in great terror, with all her jewellery carefully hidden away in odd corners of the carriage. After a few days they found a suite of suitable apartments, engaged a man and his wife as their attendants, and settled down for the winter. The climate and all their surroundings afforded them pleasure; their mode of living was simple, and therefore much to their liking; tea and conversation in the evenings were the chief entertainments of which they partook at other houses, or were expected to give in their own. For society they had a number

of old friends,—amongst them Lawrence Macdonald, Mr and Mrs Taylor of Norwich, and Dr S. G. Howe and his wife from America,—and amongst new ones, John Gibson, the sculptor, and Mrs Mary Somerville, author of "The Connection of the Physical Sciences," &c. Combe entered into the business of sight-seeing with relish; and with some humour he tells the Doctor of a disappointment he had in an attempt to see the Pope.

"*Sunday,* 18*th Dec.*—I have just been detected in a pious fraud! The Taylors asked us to go to the Sistine chapel to see the Pope and cardinals. Gentlemen must appear in a full dress of black; and I had no black coat. Cecy and Mrs Taylor pinned up my Oxford grey surtout in such a manner that they assured me no servant of the Pope's would know it from a black coat, but the Swiss guard was too knowing for them. The colour passed, but he detected the long tails, and I was turned back. The ladies and Mr Taylor were admitted, and were greatly edified; and I was justly punished for lending myself to such a deception. But Mr Taylor promises to lend me *his* black coat some day, and I hope by this means to diddle the Swiss guard, as it is not stipulated (for good reasons in Rome) that the black coat must be the man's own when he appears in presence of the Pope."

At this time he studied nothing as a task, but with his wife he took lessons in Italian; he read little, wrote only when inclined, walked a good deal in the sight-seeing expeditions, and rejoiced in capital health. The Vatican galleries and the studios of painters and sculptors formed a vast field of interest to him, and he was very diligent in his visits to both. He had already grasped the theory which formed the basis of his subsequent art criticisms, namely, that mental organisation influences physical or muscular development, and that the two must harmonise in every good work of art. He therefore saw in the application of Phrenology to painting and sculpture an important means of aiding artist and critic,—the one in production, and the other in estimating the value of the result. The idea was communicated to Lawrence Macdonald, who about

twelve years previously had initiated him into the philosophy of art, and who now encouraged him to publish his notes. Writing on the subject to the Doctor, 20th November 1843, Combe says:—

"One part of my inquiry was new to Lawrence, viz., What inspired Raphael not only with grace, judgment, and power of expression, but with the instinctive sagacity by which he was led to connect the right form of head with the right mental character? I found original portraits of all the great masters in art in Milan, Genoa, or Florence, and came to the following conclusions:—Leonardo da Vinci and Raphael had the highest temperaments (nervous, sanguine, bilious); and the finest combinations, viz., large anterior lobes, large moral organs, and full propensities, all harmoniously developed. From these qualities they were the greatest painters; farther, these gifts constituted them *fine and perfect instruments for trying the tone and pitch of all the faculties in other men.* They felt acutely all discords and harmonies between their own *Wesens* or Beings and those of other men. Their powers of observation led them to note the whole form and expression of those who harmonised with and differed from them; and hence was revealed to them the connection between certain forms of the head and certain characters. They found that great and good men had heads like their own, and pure, peaceful, graceful expressions of countenance (both of these painters were themselves beautiful); and in painting the highest characters they reproduced themselves, with modifications. In painting low and medium characters, they sought for low and medium men, and copied their forms. Michael Angelo had a large head, a dark bilious and nervous temperament, large anterior lobe, great Combativeness, Self-Esteem, and Firmness, with Ideality, Benevolence, and Veneration all less in proportion than these. He seems also to have had great Concentrativeness. He wants the grace, softness, moral purity, and depth of sentiment of Raphael and Leonardo da Vinci; but he excels them in the expression of energetic and intense intellectual action, and of self-determination. His heads are not so perfectly in accordance with the expression as those of Raphael, because his own brain, as an instrument of feeling and judging, was not so perfect. Other examples occur. Andrea del Sarto had a smallish head, with predominant knowing organs; his drawing and colouring are firm; but almost all his heads of Christ, the Apostles, and Saints are too small and too deficient in the

anterior lobe and coronal region to be dignified. He obviously did not feel and did not understand qualities superior to his own, and did not appreciate the forms which expressed them. Pietro Perugino, the master of Raphael, and a great painter, had a large head, with a large, long, broad, and high anterior lobe. His temperament was highly sanguine and partly lymphatic. *All* his ideal characters which I have seen are of the *sanguine* temperament, and they have the grace, power, and softness which subsequently characterised Raphael, but not in such a high degree. His sentiments and propensities cannot be seen for his cap; but his works show a clear perception of the meaning of the moral and intellectual head. One can understand how Raphael adopted his style and speedily surpassed him. Raphael had his form of brain in a still higher condition of combination and temperament, and therefore felt and saw as he did."

Mr Macdonald, and another artist, Mr Robert Tait, assisted Combe in verifying and maturing the principles which he advanced in his letters on "The Application of Phrenology to the Fine Arts." The first letter was written by the middle of December, and despatched for publication in the *Phrenological Journal*, in which it appeared in April 1844. His expectation of its effect was modest; he did not think it would interest twenty people, because "Phrenologists in general know nothing and care nothing about Art, and artists care nothing about Phrenology; and to be appreciated the readers of the article must take some interest in, and know something about both. But if the views be sound and useful, they will keep till minds arise to use them as helps to better expositions. Meantime they have agreeably interested me."

He was soon agreeably surprised, however, to find that the letters were not only read by phrenologists, but also by artists, some of them men who had already made their reputation, Haydon and George Harvey amongst others. The letters appeared at intervals in 1844, 1846, and 1847, as Combe's studies in the galleries of the Continent and at home supplied him with new reflections and new illustrations of his theory. But it was not until May 1855 that he put them forth in the per-

manent form of a separate book under the title of "Phrenology Applied to Painting and Sculpture;" and even then he did so with diffidence, explaining that he felt himself in relation to Art to stand very much in the relation of the scientific chemist to the brewer and baker,—ignorant of the practical details of their trades, but still able to explain the laws of fermentation which they must observe to succeed in their manipulations. "This analogy, however, is not complete," he said; "for in Art, genius is indispensable to the successful application of rules. But still, one who has studied the science of man by a new method may have become acquainted with facts and principles calculated to aid the artist in realising his own inspirations." The work was divided into eleven chapters, dealing with the sources of the pleasure derived from the Fine Arts; proportion and expression in the human figure; the constituent elements of expression in painting and sculpture; the temperaments; the relation between particular regions of the brain and particular characteristics of the body; illustrations of the principles involved in the treatment of the foregoing subjects; an inquiry into the natural endowments necessary to the artist; the cerebral development and genius of Raphael; remarks on his works; and a study of his cartoons. In his studies of Art, Combe's object was to find a complete philosophy of painting and sculpture, so that *reasons* might be given for the judgments pronounced upon the works of artists. His argument was based upon the following principles,—and here, as in all he wrote, his tendency to systematise, or to bring everything into strict order, is prominent:—

"The human mind and body are the highest objects with which the painter and sculptor have to deal; and while the faculties of the one and the organs of the other are not scientifically known, correct representation of their combined effect must be extremely difficult. While, for example, the relations between mental endowment and corporeal form and expression are not ascertained, the rules of art and the principles of judging art must, to a corresponding extent, remain empirical. The

key to the science of human nature is to be found in physiology. The brain and nervous system are the organs by which mind is manifested in this life, and, in so far as Art is concerned, the other portions of the human frame are merely its executive instruments. It is mind which gives to them their character and charm. The physiology of the brain and nervous system, by developing the science of mind, and general physiology by unfolding the structure and functions of the other portions of the body, will enable the artist to understand the relations subsisting between particular mental endowments and particular corporeal forms, expressions, and qualities, and this knowledge should furnish one element towards constructing a philosophy of art."

One of Combe's most interesting experiences in Rome was the examination of a cast of Raphael's skull, the development of which indicated the possession of all the fine qualities expressed in his works. Combe was the more interested in this examination owing to these circumstances:—In the Academy of St Luke at Rome, a cast said to have been taken from the skull of Raphael had been preserved for nearly two centuries. Mr William Scott having seen this skull, wrote for the *Phrenological Journal*, vol. ii. p. 329, an elaborate essay on the genius and cerebral development of the painter, estimating the temperament from one of Raphael's portraits of himself. It was afterwards discovered that this was not a cast of Raphael's skull, but of that of Don Desiderio Adjutorio, the founder of the Society of the Virtuosi of the Pantheon in 1542, and a mere dilettante in Art. This was an excellent opportunity for the ridicule of the opponents of Phrenology, who fully availed themselves of it. On the 14th September 1833, by order of the Pope, the tomb of Raphael in the Pantheon was opened, and the body found. Two casts were taken of the skull, of the bones of the hand, and of such other bones as were entire. One of these casts was placed in the official custody of the Chevalier Fabris, president of the Roman Academy; and on the 7th January 1844, Combe was permitted to examine and measure it. He found that it closely resembled Adjutorio's in

many respects, and that, granting to the latter, Raphael's temperament, Mr Scott's estimate of the character would have been essentially correct; he also found that where the skulls differed the genuine one corresponded more exactly with the character of the painter. He gave a full account of the development and character in the *Phrenological Journal*, vol. xix. p. 42, and in the work on Phrenology applied to art.* In reference

* "The first look of the skull conveys the impression that it is smaller than the average of British male skulls. Its form is a beautiful, graceful oval; and its surface appears to have been remarkably smooth and equal. My first observation was, 'How like it is to a female skull of the highest class!' Chevalier Fabris observed, 'That remark is striking, for Raphael is described by his contemporaries as having possessed much of the delicacy and grace of the female character,' and he called my attention, at the same time, to a cast of the bones of the hand found in the coffin; they were long, slender, and graceful. On examining the skull more minutely, the left side was found to be a little larger than the right, the difference extending nearly throughout all its parts. A farther scrutiny showed that the development is in an uncommon degree equable and harmonious, bespeaking corresponding equability in the development of the different parts of the brain. . . . The details of the development are as follows:—The measurements were taken with callipers applied to an English footrule—

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|---|---|
| From Individuality to a point immediately below the occipital spine, the spine itself having been destroyed by the mud, . | $6\frac{4}{8}$ inches. |
| Comparison to the point nearest Concentrativeness, the skull over that organ itself having been also destroyed, . . . | $6\frac{4}{8}$ ,, |
| The meatus auditorius to Firmness, . . . . | $5\frac{2}{8}$ ,, |
| Do. do. to Individuality, . . . . | $4\frac{5}{8}$ ,, |
| A point corresponding to the posterior margin of the superorbitar plate to Individuality, . . . . . | $3\frac{1}{8}$ ,, |
| A point corresponding to the posterior margin of the superorbitar plate to Comparison, . . . . . | $3\frac{2}{8}$ ,, |

| | | | |
|---|---|---|---|
| Constructiveness to Constructiveness, . . | $4\frac{2}{8}$ inches. | Secretiveness to Secretiveness, . . . . | $5\frac{3}{8}$ inches. |
| Ideality to Ideality, . | $4\frac{4}{8}$ ,, | Cautiousness to Cautiousness, . . . . | $5\frac{3}{8}$ ,, |
| Destructiveness to Destructiveness, . . | $5\frac{2}{8}$ ,, | | |

| | | | |
|---|---|---|---|
| 1. Amativeness, . | rather large. | 3*a*. Inhabitiveness, judging from the impression in the clay, | large. |
| 2. Philoprogenitiveness, judging from the impression in the clay, . . . | large. | 4. Adhesiveness, judging from the right side of the cast, . | large. |
| 3. Concentrativeness, judging from the impression in the clay, . . . | large. | 5. Combativeness, judging from the right side of the cast, . | large. |

to size, he makes this note in his Journal:—"The size of this head proves that fine temperament and beautiful combination suffice to render a man a great painter, without great dimensions in the general cerebral mass. In the arena of public life, Raphael would have been wise, prudent, good, even profound in calm thought, but not weighty in impression or power."

Combe's eagerness to see everything took him, on the day after the inspection of Raphael's skull, to the College *di Propaganda Fides*, where he heard services in honour of the Saviour's birth (this being the anniversary of the day on which the three wise men of the East were led to Bethlehem by the star), pronounced in forty-nine languages. The speakers were young priests from all parts of the world—from China to Sweden, from Siberia to Timbuctoo; and even the dialects were represented—that of the Lowland Scotch by "Eugenio Small di Paisley." In the evening he attended one of the balls of Prince Torlonia in Cardinal Wolsey's palace, near St Peter's, where he saw princes, cardinals, priests, English peers and peeresses mingling with artists and commoners in a scene of splendour which dazzled the eyes.

6. Destructiveness, . rather large.
6*a*. Alimentiveness, . rather large.
7. Secretiveness, . large.
8. Acquisitiveness, . rather large.
9. Constructiveness, . full.
10. Self-Esteem, . . moderate.
11. Love of Approbation, very large.
12. Cautiousness, . large.
13. Benevolence, . . large.
14. Veneration, . . rather large.
15. Firmness, . . large.
16. Conscientiousness, . very large.
17. Hope, . . . moderate.
18. Wonder, . . rather large.
19. Ideality, back part, (Sentiment of the Sublime?), . . moderate.
Ideality, front part, (Sentiment of the Beautiful?), . large.
20. Wit, . . . full.
21. Imitation, . . large.
22. Individuality, . large.
23. Form, . . . large.
24. Size, . . . large.
25. Weight, . . large.
26. Colouring, . . rather large.
27. Locality, . . large.
28. Number, . . moderate.
29. Order, . . . full.
30. Eventuality, . . full.
31. Time, . . . full.
32. Tune, . . . large.
33. Language, . . uncertain.
34. Comparison, . . large.
35. Causality, . . very large.

—*Phrenology applied to Painting and Sculpture*, pp. 99 and 100.

He had also an excellent opportunity of studying the organ of Language, for he was presented to Cardinal Mezzofanti, who was reputed to know forty languages. He describes the cardinal thus:—

"He is now an old man, apparently about seventy, of a strong bilious and nervous temperament, with a head of average size; he is slender, of average stature, and very active. His anterior lobe is only average in general size; but language is large; the knowing organs and the middle perpendicular region are large; the other organs are moderate. I had been told that his eyes are not prominent, but this is incorrect. Much as the eyebrows project, and spare as is the figure, the eyes stand out to the line of the eyebrows, and viewed from the side, are seen distinctly to project. I asked him if he ever forgot a word after having once learned it, and he said that he did, until he had learned its relations and its power when combined with other words, after which he recollected it better. Still, he said, all languages must be used, not to slip more or less from the memory. He learns a language most easily by speaking it and hearing it spoken. The most difficult languages are the Sanscrit and Arabic. Each Chinese sign is a word; all Chinese scholars attach the same meaning to the sign, but pronounce the word differently in different provinces. His form is large, and he was fond of botany. He said that it is in languages as in botany, the more you know the more easy it became to distinguish and remember the analogies and differences of words and plants. I asked him whether seeing a word printed or written assisted him in recollecting it and its meaning, but he did not seem distinctly to comprehend my question. My object was to discover whether Form, which is large, aided his Language by enabling him to associate the shapes of the words with their sounds and associations. I mentioned to him Cuvier's memory of forms, and this led him to say that he was certain there were different kinds of memories; that there is a local memory, and probably also a memory for forms and a memory for words."

Combe was struck by the large organ of Form possessed by the Cardinal, and speaking of it to the Chevalier Barberi, a famous worker in mosaics, the latter said he could give an illustration of its power:—

"The first time he saw Mezzofanti, he went to introduce him to a Russian general. The cardinal mistook Barberi for the general's aide-de-camp, and addressed him in Russian. He explained that he was a Roman. The cardinal then spoke with the general in Russian. A period of eight years elapsed during which he did not see Mezzofanti; but being one day in a crowd of people in St Peter's, the cardinal came near the place where he stood, looked at him, and then addressed him in Russian, asking when he returned to Rome, and how the general was. Barberi answered that he was a Roman, and had never left Rome since he last saw him eight years ago. The cardinal said, 'Oh yes, you told me that you were a Roman when you came with the general; but I mistook you for a Russian, and it is always the first impression that remains with me.'"

In the Roman States, and especially in Rome, the aspect which Christianity presented to Combe was that of a great means of salvation; all its teachings and exactions had reference to a future life, and in exact proportion, the temporal welfare of the people was neglected. In Protestant Germany, there was less concern about a future state; priests and people assumed salvation as certain; and in no country which he had visited was "the genuine spirit of humanity more all-pervading." To his brother, the doctor (who was spending a second winter at Madeira), he addressed the following observations on the condition of the Roman people:—

"Rome, *6th February* 1844.

"My Dear Doctor,—You cannot expect me to give you amusing letters from Rome, for here there is no incident; you must just take description and remark, therefore, as the best offering which I can present at your shrine, and I shall tell you on this occasion about the Roman prisons, which I have recently visited. But, first, let me remark that the Pope possesses advantages which fall to the lot of no other earthly sovereign. He is the head of the spiritual and of the temporal government of the Roman States, and in both capacities he enjoys absolute power. In his spiritual capacity he enjoys more; he and his council possess infallibility in the interpretation of Scripture, and in the regulation of all moral and spiritual affairs. There is no clashing of temporal and spiritual jurisdictions here. No one can complain that the full efficacy

of Christian doctrine on morals and social happiness, is obstructed or diminished by infidel rulers, or lukewarm public functionaries who care for none of the things of Christianity. The Pope has an array of 5000 priests in Rome, sworn to do his pleasure, and 4000 soldiers equally devoted to his cause. The vicar and bishop preside in courts of morals, with power to commit to prison all offenders against the moral law. The Pope, cardinals, and priests, have the Bible in their hands, and are in possession of all the learning that has accumulated from the age of Homer down to the present day. I told you that I heard them celebrate the feast of the Magi in 49 languages or dialects; and every voice concurs in testifying that they are learned theologians and skilful disputants. They lack one thing, however, sadly; but which many serious persons consider as *not* the one thing needful, viz., a practical knowledge of natural science, and a practical perception of the laws, physical and moral, by which God governs the world. In Rome, every effort is made to prevent the diffusion of this kind of knowledge, while *faith* is taught with unceasing assiduity. Let us contemplate the result in the management of their prisons.

"In the first place the Roman brain is by nature remarkably active. The temperament is nervous bilious, the eye is generally dark in colour and bright with vivacity, and wherever a motive is presented to the people they seem to me to be quick. In their conversation one hears evidence of their mental activity that cannot be mistaken; they speak rapidly and emphatically, and use much gesticulation. But in the common people the brain is generally considerably smaller than it is in the same class in England and Germany, and it is not well formed. Three-fifths of the lower orders in Rome appear to belong to the exotic class. They have long lank limbs, small chests, long necks, and small ill-shaped heads. There is no national type in their heads. In some the anterior lobe is small; in others the coronal region is the defective part; in others the posterior lobe from Philoprogenitiveness to Firmness seems shaven away. In some the base is narrow, in others broad. Physiologists regard these as the descendants of the slaves imported, and of the conquerors who settled in Rome. They present the appearance which plants and animals transported from a cold to a warm climate assume, after several generations. What is called the old race has a well-defined national character. Their brains are large; the anterior lobe is generally well-developed; the base is very broad, and the coronal region in proportion to these two is flat; while the posterior lobe is well developed. They are generally strong

large-chested, muscular men, with short necks. The Roman priesthood teaches these subjects the ceremonies of the Catholic religion, and compels them to go to confession and take the sacrament at least once a year; but it does little to enlighten their intellects and direct their moral sentiments towards the practical guidance of their propensities. The result is what might be expected. The lower orders are passionate, revengeful, thoughtless, and superstitious. When excited, which they are very easily, they rush to action for good or evil, reckless of consequences. They are not malignant; on the contrary, taking them all in all, I should say that they are good natured; and in circumstances of distress many of them are actively kind and compassionate. The sense of justice being much neglected in their education, truth and honesty are rather rare virtues; yet I see many individual instances in which Conscientiousness is large in the brain, and I have found the sentiment in a corresponding degree of activity. The higher ranks have better formed brains. I have again and again remarked the development of brain seen in the theatres is far higher than that observed in the churches; the theatres attract the larger, the more intellectual, and the better proportioned heads; while the small, ill-shaped, and heterogeneous brains form the staple of the worshippers in the splendid sacred edifices with which Rome abounds. In this remark, I speak only of the majority. In the theatres one may pick out very bad, and in the churches very high instances of cerebral endowment; but I reckon the general fact certain, that the theatres, in consequence of affording almost the only intellectual excitement (besides the galleries and studios for statuary and painting) in Rome, attract the minds of the highest natural endowments and cultivation. Generally, the female brain is better proportioned than the male.

"The criminals presented by this population are such as might be expected from their nature and circumstances. The tendency to strike and stab is so predominant (the fruit of vivacious propensities and untrained intellect), that the law awards imprisonment for several years for merely carrying concealed lethal weapons, even without using them. The night police stop passengers in the streets, search their persons, and if a stabbing knife or dagger is found, they are sentenced to one, two, three or more years of imprisonment. Wounding, stabbing, homicide, murder, and carrying concealed arms, constitute three-fifths of the crimes committed by the male convicts in the prisons of Rome; one-fifth, or a little more, are condemned for thefts; and the remainder for false-swearing, smuggling, insubordination, and such-like offences.

"It is obvious that many individuals may be guilty of the first class of offences from sheer momentary impulse, without either their dispositions being naturally bad, or their intellectual faculties defective, and accordingly I was struck with the number of improvable subjects which the male prisons presented. But how are they treated? Before being tried they are crowded together to the number of thirty, forty, fifty, or sixty in one apartment, night and day, in utter idleness, and without superintendence. After trial, while an appeal is pending, they remain in the same prison and condition, and also after sentence is pronounced until sent to their ulterior destination. I here refer to the 'Carceri Nuove' in the Via Julia. I found in this prison 313 individuals belonging to all these classes. They were mixed promiscuously, and the average period of detention of each individual in it is from six to seven months. Some of them, after this period, may be declared by the judges on trial to be innocent of the offence charged against them, and be dismissed, but without compensation for the horrors and degradation and contamination of such an imprisonment.

"Those who are condemned to one year's imprisonment or more are transferred to the galleys, to the Castle of St Angelo, to the 'Bagno' at the Baths of Dioclesian, or other similar places of confinement. The condemned criminals in the Castle of St Angelo and the 'Bagno' wear a prison dress, and most of them carry chains on their legs. They sleep in large apartments containing 40, 50, or 60 each, and are employed during the day on the public works in Rome. In the 'Bagno' prison there were, on the day of my visit, 440 individuals; but the public works afforded employment for only about 200 of them, and they were taken out in turns. Those not employed were sitting cold, shivering, idle, and miserable in the great halls; but the moment we left, they broke from their silence and sedate positions, and all the Italian vivacity was heard. We tried the experiment with these prisoners by presenting them with a book to ascertain how many could read. Only about 12 per cent. could do so; and not above 1 or 2 per cent. could write. We found only one book in the whole prison lying visible, and it was a copy of Tasso! There is a chaplain in the 'Carceri Nuove' and to this prison, and the convicts hear mass on Sundays, and the Jesuits administer spiritual instruction to them at other times. Their food is pretty liberal, and the prisons are more clean than could well be expected under such a system; but the bed-clothes are very scanty, and in winter the prisoners

cannot undress without suffering an extremity of cold that must be injurious to health. This gives them a squalid look. The instruction given in prison does not include reading and writing. A person may pass ten years or a whole lifetime in these prisons, and at his release by expiration of his sentence or death, be incapable of reading and writing, if he was so when committed. It is self-evident that mere oral instruction in morals and religion can accomplish but little when not assisted by reading. The spiritual instructor may lecture a whole hour a week on each individual (and this is probably beyond the mark), teaching him to love God and to do good to man; but the prisoner's own active unguided propensities, and those of his fellow-prisoners, will teach him, during probably six hours each day, to appreciate the delights of satisfied revenge, how to strike with the surest aim, how to rob with the least chance of detection, and how, in prison, to humbug the priest and elude the vigilance of the jailor! Yet the Pontifical Government are not so much to blame as at first sight might appear, except in so far as they consist of Christian priests, with the Bible in their hands, professing to use it as their rule of conduct, and possessed of temporal power to carry all its precepts into execution. Viewed as mere lay rulers, they are only twenty or thirty years behind England, and are in many respects in advance of some of the German princes in the administration of their jails; but I repeat that, as Christian ministers, they, by this open war between the real dictates of Christianity in the treatment of criminals and their practice, are teaching most forcibly lessons of infidelity, and giving matter of rejoicing to the scoffer.

"Another example of the same disregard of practical Christianity is exhibited in the Papal Lottery. In almost every street in Rome there is a 'Reverend Apostolical Lottery Office' (was there ever such a combination of names united before!), in which tickets so low in price as twopence-halfpenny are sold to tempt the poorest of the people to gamble! and on holydays, when all other shops are rigorously shut, not only are these open, but long lists of numbers are obtruded on boards in the public streets, often directly opposite to the door of a church, the better to catch the simple citizens as they go to or return from their devotions! That the poorest of the people are tempted by these lotteries I know by the directest observation. I have, for servants, a married man and his wife, who have a family to support, and their joint wages are only £3 a month, the usual rate in Rome. One morning I found them both much agitated, and in great

distress. They had bought five numbers in the lottery; Antonio in dusting his breeches over the window had shaken out the tickets; they were drawn prizes amounting to 89 scudi (nearly £20 sterling); and it was only on looking for the tickets, and finding them nowhere, that Antonio recollected having seen some loose papers fly from his breeches, which he had imagined to be waste paper, but now recollected that they were the tickets! They are all payable on presentment to the bearer, and his loss was irremediable! To give sanctity to the lottery, the drawing is superintended by priests! and the boy who draws makes the sign of the cross each time before putting forth his arm into the urn! *The keys of heaven* are painted with the mitre on the lottery office sign-board!"

Mrs Combe had suffered much from colds during the winter, and for the benefit of her health an excursion was made to Naples in the beginniug of March, accompanied by Mr and Mrs Taylor. Here Combe continued his studies of painting and sculpture with undiminished ardour. He met Dr Luigi Ferrarese, the Italian Phrenologist, whose liberal opinions had placed him under the suspicion of the government, and materially impeded his success as a physician. But he adhered to his opinions, and submitted to his straitened circumstances. On his return to Edinburgh, Combe induced the Henderson Trustees to send a cheque for ten guineas to Dr Ferarrese, as a slight token of their appreciation of his services to Phrenology. The faces of the Neapolitans, Combe observed, were longer and thinner than those of the people of Rome; some were like Celts, others like what Spurzheim called the Phœnician type; the heads of many of the men were very small, and dirt and squalid clothing abounded everywhere.

"The brains did not indicate either a powerful or a ferocious people. Among them was a proportion of good sized and well formed heads; and we were struck particularly with the fact that the female brain was superior to the male. It was of a full size and well formed, long, not too broad, with a fair coronal region, and good anterior lobe. In both sexes large knowing organs are more common than among the

Romans. The temperament is generally nervous sanguine bilious, and the number of very dark skins is small; many are surprisingly fair and white. The face is long and thin. The tradition that they are Greeks is borne out by their forms. What can cause the superiority of the female brain? Has woman in despotic countries a freer field for the natural exertion of all her faculties than the man? And does this activity in their appropriate sphere develop the brain more completely? In all countries the female brain excels the male in the moral organs in proportion to the propensities; but in England and in the United States the general and absolute size of the female brain does not approach so near to an equality with, or to a superiority in, so many individual instances over the male brain as in Naples."

Whilst exploring the ruins of Pompeii and visiting Vesuvius Combe displayed more physical energy than he had done for several years, and Mrs Combe's health improved during the month's sojourn in Naples. Another month (April) was spent in Rome, and on the 25th April they took their departure without much regret. The works of art had afforded him intense and abiding interest, but the mass of the people had made a most disagreeable impression on him. He went away pitying those of his friends who were "doomed to live in such an atmosphere of dishonesty, passion, and folly." They travelled by way of Genoa, Milan, Verona, Venice, Innsbruck, and Munich to Heidelberg, resting a day or two at each place; and he found this route much more agreeable than that by the Stelvio pass. The following extracts from his journal reveal the healthy state of his mind at this date:—

"*May* 20.—We have enjoyed our whole journey from Rome very highly. Cecy's health and my own are improving. I have never in my life travelled in such perfect health as I now enjoy; and the prospect of home before us gives a charm to all we see. The kind, honest, quiet Germans delight us; every turn of the road presents fresh beauties; and all nature seems so young, so smiling, so made to afford pleasure to sentient beings, that our souls ever and anon rise to the great Giver of all, thank Him for allowing us to rejoice amidst His bounties, and feel that confidence in His goodness, as well as

in His wisdom and power, which is ever strongest in my mind when I am in my best health and most happy. In the midst of this enjoyment I have often contemplated death, and my own inevitable near approach to it, and the thought infused not one drop of sorrow into the cup of pleasure. I felt the views expressed in the 'Constitution of Man' to be true; and again conclude that death wears its mournful aspect only when the moral or organic system, or both, are out of order;—in short, that a man is best prepared to die when he is morally and intellectually most happy."

"*June* 2.—Clear, bright, warm—Every step in Heidelberg reminds me of pain and suffering. Good God! What a contrast is my present condition to my state in June and July 1842! I now know emphatically that I was not well even in May of that year, when I undertook my task of lecturing. Now every scene looks so bright and cheerful that I seem to have had the shadow on the dial put back five-and-twenty years! As I recollect the torture I suffered in walking from Bodani's house to the lecture room to put out the casts, how I was forced to sit down twice on the way, on stones or deals when the seats were all occupied; how I was agonised in walking from the house to the bath in the High Street; how great an effort it cost me to walk to the lower end of the Pariser Strasse before dinner; and how, latterly, I lay in pain till five p.m. on the lecture nights, and rallied only as the hour (six o'clock) of lecturing approached—I am surprised at the power of the excitement under which I then laboured, which rendered me in some degree unconscious of my condition, and carried me through. I shudder when I even imagine going through such a scene of suffering again; and yet while engaged in it, although I was dull, languid, pained, miserable, I was never depressed. The hours of freedom from acute pain were pleasing from the contrast, and a strong will enabled me to endure all to accomplish my object. With all these painful associations, I look back with satisfaction on my efforts to resuscitate Phrenology in Heidelberg, and hope that they have not been made altogether in vain.

"I cannot sufficiently thank the good God for so great an amendment in my condition. Cecy's health, too, goes on improving, and with health has returned to her that cheerfulness and strength of mind of which the malign influences of Italy had so long deprived her. Altogether, life never wore a brighter aspect with both of us since we were married than it does in Heidelberg at this hour."

"*Amen!—Cecy.*"

The last two words are in Mrs Combe's handwriting. Having visited their friends in Heidelberg and Mannheim, they continued their journey by Rotterdam and Hull to Edinburgh, and landed at Leith harbour on the afternoon of 13th June. Dr Combe, who had arrived from Maderia on the 7th of the month, and Mrs Johanna Graham were at the landing stage to give them a glad welcome home.

As their house in Melville Street was not yet ready for occupation, the Combes took apartments in the farm house of Clermiston on Corstorphine hill, about three miles west from Edinburgh. It was a pleasant retreat, within easy reach of the city, and yet possessed of all the charms of pastoral quietude. At the foot of the hill on one side, the village of Corstorphine—a small place, still innocent of modern villas, and in which the kirk, the manse, and the smithy were the important centres of the people's interest. It stood on the borders of what had once been a great marsh, but which agricultural science had now transformed into a fruitful plain; beyond this the Pentland hills, too often swathed in a white mist, but when blessed with sunshine, revealing soft outlines, and hollows of varying green and purple, dotted with sheep. Then looking eastward on a clear day, the castle rose proudly above the high, irregular roofs of the dependent city, and Arthur's Seat in a grey gloom overlooked them all. On the northern side of Corstorphine hill the Forth gleamed in the sunlight, guarded by the undulating lines of the Fifeshire hills. Close by, in a deep wooded hollow, was Craigcrook, so long the residence of Combe's early opponent, Jeffrey; and a bossy glen, rich in blue bells, fox-gloves, and forget-me-nots, for meditative strolls on summer days. Combe was so happy here that he came to the conclusion that a residence on some elevated ground with picturesque surroundings was most suitable to him; but unfortunately Mrs Combe again caught cold, and this time became so ill that for a few weeks the doctors thought it would be necessary to send her for the winter to

Maderia. She was, however, reprieved; and Dr Combe also was permitted to remain in Edinburgh, both under strict conditions as to the hours of exercise and the temperature of their rooms.

On the 25th September, the eleventh anniversary of their marriage, the Combes took possession of their house, 45 Melville Street, the decoration and furnishing of which had afforded to Mrs Combe much pleasant occupation. "We have looked forward to settling here and enjoying in calm repose the evening of our lives," writes Combe somewhat sadly. "It is well ordered that we do not know what events lie before us; we see our present circumstances, and in entering this house we picture to ourselves some years of life, health, and enjoyment; God sees, perhaps, disease, death, disappointment near at hand. But these misfortunes, should they come, will be the consequences of past departures from His laws. The fair course of his arrangements would allow us all that we hope for; and if we realise less, the errors of ourselves or of our forefathers are the causes of our disappointment. Blessed, therefore, be God!" Although he was restored to health, there was a limit to his exertions; he could either think or digest separately pretty well, but he could not do *both.* He therefore suspended, in the meantime, his intention of writing "Notes on Germany," and occupied himself chiefly in light reading —and not much of that—correspondence, and in preparing short articles for the *Phrenological Journal.* One book came to his hand which immediately took hold of his attention, and roused all his reflecting faculties to their old activity. In a letter to Mrs Lucretia Mott, 10th October 1844, he says :—

"Yesterday I received 'from the author' (who does not give his name either to the public or to me) a book named 'Vestiges of the Natural History of Creation,' London, published by John Churchill, 1844, which you would read with interest. It gives a clear and succinct history of the formation of the stars, sun, and planets as far as astronomy and chemistry have

revealed their transitions; next a history of the physical formation of our globe, drawn from geological sources; then the geological history of the extinct races; afterwards the physiological characters of the existing inhabitants of the globe; the whole concluding with the mental constitution of animals; and 'the purpose and general condition of the animated creation.' I have only run through it, but I see that the author regards the whole universe as having been formed by a great intelligent first cause, who arranged it so perfectly that by the laws which he impressed on its elements, it evolved suns with their planets, and these with their satellites; also plants and animals, and finally Man, without his personally interfering or performing any second, third, or subservient acts of creation. He thinks that a higher species than Man may hereafter be evolved on this globe. He adopts Phrenology as the philosopy of Man; and argues that his views exalt our conceptions of the Deity, and do not dispense with Him, as many persons would suppose. The work displays great scientific learning; it is clearly and calmly written, and if printed cheaply, would be another battery erected against superstition. The point in which it appears to me to fail, is that in which the author advances the hypothesis that organised beings, vegetable and animal, have been evolved out of physical unorganised matter, viz., carbon, oxygen, hydrogen, and nitrogen, although he adduces some facts which go a certain length in sustaining this supposition."

To the unknown author Combe, without entering into any analysis of the work, wrote that it possessed for him "all the sublimity of a grand poem, and the sober earnestness and perspicuity of a rigidly philosophical induction." The authorship of the "Vestiges" was a question which exercised many minds; it was attributed to Andrew Combe and to George Combe amongst others, but Robert Chambers was the one to whom the greatest number gave the credit of the work; and an evangelical magazine, accepting this as a fact, attempted to show that the series of educational works issued by W. & R. Chambers revealed the cloven hoof, and should be banished from all Christian schools. This contemptible article met the fate it deserved—few readers and discredit amongst them. Combe had a strong suspicion that the Unknown was his

friend Robert Chambers, and without questioning him, counselled silence, even to the most intimate friends, on account of the injury an acknowledgment of the authorship would do to all the publications of his firm. One circumstance which tended to identify Robert Chambers as the author was the repetition, in an article known to be his in *Chambers's Journal*, of a blunder about the cabbage being a development of a sea-plant, which also appeared in the "Vestiges."

Towards the close of this year his attention was directed to another anonymous publication,—a pamphlet entitled "Who should educate the Prince of Wales?" The subject was one which was largely occupying the minds of statesmen and politicians; and Combe, because education was dear to him, because he had certain deep convictions on the subject, and because he hoped that, as he was to address Baron Stockmar on the important question, his words might have some influence in helping to decide the system to be adopted, entered into the matter with all the earnestness of his nature, and with a profound sense of the delicacy and gravity of the problem to be solved. The following is his letter to the Baron, and it possesses interest of a general as well as a special character:—

*The Education of the Prince of Wales.*

"EDINBURGH, 1*st November*, 1841.

"TO BARON STOCKMAR.

"Sir,—As you ask my opinion of the pamphlet 'Who should educate the Prince of Wales?' I shall endeavour to state briefly such views as occur to me on its suggestions; and, as the subject is an important one, I shall take the liberty to add a few remarks on some parts of the question not touched on by the author. The leading idea of the author, and for the sake of which he appears to have written his work, is that the educator of the Prince should not be a clergyman. This view is, in my humble opinion, a sound one. There are many other valuable suggestions in the work; but, on the whole, I fear that it contemplates too much, and that it is not a practical treatise.

"The author seems to recommend that the whole time of the Prince, except what is passed in sleep, should be occupied with some important exercise, lesson, or pursuit. It is unnecessary to remark to you that such a system, if fully carried into effect, especially in the early years of the Prince's life, would, if he were a sprightly boy, speedily lead to cerebral disease, and if he were constitutionally slow, induce inevitable disgust. The functions of the brain and its influence on the other parts of the body are now so well known, that the advantage of confining the Prince's studies and general mental exertions within the limits of his strength will be generally recognised.

"Again, as to the things which he should be taught, and the manner of teaching, the author of the pamphlet appears to assume that the Prince is to be an Admirable Crichton—a youth of universal genius, in whom the highest mental activity and the greatest powers of application will be combined with the best endowment of every physical, moral, and intellectual quality. Only on such a supposition could the capacity of his Royal Highness be conceived adequate to receive all the knowledge, accomplishments, and virtues, which are there proposed to be infused into him. But this is Utopian. In the present stage of the Prince's life, no sagacity is capable of chalking out successfully the details of his future education. His mental and physical constitutions must first develop themselves more fully, and give clearer indications than can at present be obtained of his strong and weak points; and his special studies and pursuits will require to be modified according to the future varying conditions of his mind and body. If this idea be correct, the chief object for present consideration is rather in *what principles* should the Prince of Wales be educated, than *what person* should be entrusted with his education. When the principles are clearly defined, the person may be more easily selected. The principles, moreover, appear to me to be the true national object, for on the choice of them will in all probability depend whether the future Sovereign of England shall reign in harmony with, or in opposition to, the prevailing opinions of his people. The importance of the selection of principles is increased by the consideration that opinion in Europe is, at this moment, obviously in a state of transition, and that by the time the Prince shall ascend the throne, many of the maxims of government and institutions of society, now in the ascendancy, will, according to present probabilities, have either entirely passed away, or be on the very eve of change. If King George

the Third, Lord Eldon, and Lord Castlereagh were now governing Great Britain and Ireland on the principles which they conscientiously believed to be the best calculated to promote the welfare of the nation, it is more than probable that the conflict between their opinions and those of the people would lead to revolution. If the Prince be now educated into the belief that the stability of the throne and social order depends on maintaining inviolate the church establishments of the three kingdoms, the laws of entail and primogeniture, and many other anomalies in the British constitution, while a strong current of public sentiment is setting in against them, no spirit of prophecy is needed to predict that serious convulsions may be induced at a future time by his opposing his will to that of the majority of the nation. If he inherit the firmness of purpose and conscientious feeling which have characterised many of his race, the evils would be proportionately aggravated. He might be prepared to become even a martyr to what he considered the welfare of his country and the security of his throne.

"In one of the debates on the Reform Bill, Viscount Mahon, member for Wootton Bassett, a condemned borough, is reported to have said—'Could anything be more absurd than the whole system of our hereditary legislation? was it not an anomaly that he, because he was the son of a peer, would be called to decide questions of great national importance, while another person who had studied legislation all his life, was, by the mere chance of birth, excluded from an opportunity of making laws? Was there not something unjust in the law of primogeniture by which it might happen that a worthless brute might come to the possession of a large estate to the exclusion of all the rest of the family? These were, however, parts of the constitution.'

"What his lordship designates as anomalies, are laws at variance with the reason and the moral perceptions of enlightened men. They, as part of a social system adapted to a particular state of civilisation which in some countries has passed, and in Great Britain is now passing away—they may have been useful in their day, and they may still be necessary, but if they be 'anomalies,' the necessity for their existence will diminish in proportion to the development of sounder principles of government; and in the meantime they can, in the eye of reason, be regarded only as temporary expedients for the support of order in a condition of society which is changing. The fact that many of those 'anomalies' have been brought to a termination in France and in a great part of Germany, with manifest

advantage to the people, and with additional security to the throne, affords evidence that they are not *natural* institutions, and that therefore they do not rest on a permanent basis.

"The extraordinary wealth and luxury of a comparatively small portion of the inhabitants of the British isles, and the appalling poverty and wretchedness of many among the labouring classes, is another anomaly which is at variance with our natural sentiments of humanity and justice, and finds its chief precedents in the history of ancient Rome when she was tottering to her fall. This condition of things cannot permanently endure in Great Britain. It is condemned by Christians, and the corresponding state has disappeared in France and in the greater portion of Germany. We see Ireland agitated to the centre by the dominance of a church at variance with the religious opinions of a large majority of the people; and in Scotland also, the larger proportion of the inhabitants have seceded from the Church established by law.

"If 'coming events cast their shadows before,' we may without presumption say that the shadows of great and important changes in the social condition of Britain are already so conspicuously written on the land, that the changes themselves cannot be far distant. The leading question, therefore, is, whether should the Prince of Wales be placed under an instructor who will prepare him for approaching events, or under one who will stamp perhaps indelibly the impression of the sacred character of all existing institutions on his youthful mind, and teach him that to resist change is to serve at once the cause of God and of his country? Wisdom appears to dictate the superior advantage of the former course. The instructor of the Prince should not be a demagogue or a moral enthusiast, but a man of a calm, profound, comprehensive, and philosophical understanding, imbued with a deep conviction of the indispensable necessity of practical morality to the welfare of both sovereign and people. The proper duty of the sovereigns of this country is not to take the lead in change, but to act as a balance wheel on the movements of the social body. When the whole nation, or a great majority of it, advances, the king should not stand still; but when the movement is too partial, irregular, or over rapid, the regal power may with advantage be interposed to restore the equilibrium. These considerations lead to the conclusion that the instructor of the Prince should not be a clergyman. Education by a clergyman is further objectionable because, however liberal in his views, he is bound by his station, character, and creed, to instil into his pupil's mind the supremacy of his own church

as the only sure standard of true religion, sound morality, and national government,—or, in other words, he is almost bound to exclude the lights of science and the deductions of philosophy, or at least to give them all an inferior place in the formation of his principles and opinions. Our present creeds and church principles were founded at a time when science was not, and when the foundations of morals and philosophy were equally unknown. *In their own day* they were in advance of the public mind, because then learning, such as it was, was in the hands of the priests, and of them alone. In the present day the priest retains his station in mere learning in a knowledge of the classics. The proper clerical curriculum of education has nearly stopped at that point, and the educated layman now often surpasses the clergyman in the knowledge of the general laws or principles on which God has constituted the world and regulated all it contains. The priest, thus left behind and imperfectly acquainted with the practical working of nature's laws in active social life, and amidst the conflicting interests of men, is led to fix his attention only the more strongly on his own doctrines, and is liable unconsciously to limit his pupil's mental vision to his own horizon. Living in the happy valley himself, and prevented by the rules of his order from going beyond its confines, he will not allow his Prince to cross to the other side of the mountain chain, and see man and his doings for himself. Freedom of thought and action are thus quenched in their earliest growth, and discontent and feebleness and prejudice installed in their place. Let there be a priest, by all means, to teach him his religion and its bearing on the practical duties of life, but do not set a priest to preside over a course of general education for which he is of necessity entirely disqualified. The Prince is to be educated for active life and not for the church; and it would be as wise to send a future bishop to be educated exclusively by an astronomer, philosopher, or politician, as to place a prince under the superintendence of a bishop.

"Above all attainments, the Prince should be trained to freedom of thought, and to a firm reliance on the inherent power of sound principles, political, moral, and religious, to sustain themselves and produce practical good when left in possession of a fair field of development. Such an education a conscientious divine of the Church of England could scarcely be expected to communicate, because the creed to which he has sworn would directly arrest the progress of his understanding, wherever truths at variance with it threatened to break upon his vision. A deep and sincere devotion to one form of

Christianity, and to the maxims of civil rule arising out of it, leads the mind to view all other forms of it as either positively erroneous or defective; and such an impression cannot be favourable to the sovereign of a state distracted by a multitude of powerful and conflicting sects. Indeed, no task will be more difficult and delicate than to conduct successfully and discreetly the religious education of the Prince. The vice of the educated classes in this country is conventional hypocrisy. Between this and bigotry it is often difficult to steer in the present state of religious opinion; but it is highly desirable that he should be trained in a profound and sincere respect for religion, yet be free from all bigotry and superstition.

"As the Prince's education should be prospective, and adapted to a state of transition, both in opinions and institutions, it may not be irrelevant to introduce a few observations on the dawn of a change in the religious opinions of the civilized world, which is already discernible on the distant horizon. In the course of my visits to the United States of North America, and to Germany and Italy, I have endeavoured to ascertain the opinions entertained by the moral, well-educated, and vigorous minds among the laity on the subject of religion, and I may safely say that, with few exceptions, I have found that, while the conviction is general that religion has its foundation in the nature of man, that it tends to exalt his character and promote his happiness, there is on the other hand an opinion more or less decided, that Christianity is merely a republication of the religion of nature, and that its pure and comprehensive morality is the solid foundation on which all the supernatural portions of its structure rest. In Great Britain, as is well known, similar ideas are far more prevalent than external indications would lead an observer to imagine. In opposition to these thinkers stands a vast array of able, conscientious, and enlightened persons, who regard the supernatural portions of Christianity as its most valuable element, and who lend their chief efforts to the propagation and infusion of these into the public mind. The former class place their chief reliance for the improvement of society on the development of a knowledge of the institutions of nature, and on our obedience to the natural laws of our being. They are persuaded that God actually governs the world; that he has established a system of all-pervading causation on earth coincident with the dictates of the purest morality and the soundest religion; framed man in harmony with the system, and left him, by the exercise of his reason and the discipline of his will, to work out his own weal or woe in every stage of his existence. In other words, that a *consequence* of good or

evil is attached by the Creator to every action of man, and that the good follows actions which conform to reason, morality, and religion, while evil is the consequence of error, passion, and injustice in its every form.

"This class regards the discoveries of science and the sound inductions of philosophy as so many revelations of the divine will for human instruction and guidance, and they view the occupation of the public mind by the supernatural dogmas of religion as an obstacle to the appreciation and practical adoption of these real revelations. A constant war is carried on, in some instances openly, but more generally from masked batteries, by this class of persons on the prevailing religious opinions. In all ages there have been unbelievers in the popular religion of their day, many of those, as is generally believed, from aversion to the restraints which religion imposes on their passions; but the class to which I now allude is composed of different elements; it comprehends individuals who are moral in their conduct, sincerely attached to social order and just government, and whose dissent from the supernatural doctrines of Christianity is founded on deep historical research and the most serious reflection; and they lament the slow progress which is made in the application of science to social life, in some measure, as they conceive, in consequence of the preoccupation of many excellent minds with supernatural doctrines. In looking to the future, I cannot avoid the inference that this party contains the seeds of important modifications in the opinions and religious institutions of the British Empire. At present, few public demonstrations are made by this class in Britain; but, according to my observation, their numbers are considerable and increasing; and they include not only many members of the aristocracy and learned professions, but a portion of the operative members of society, of respectable character and condition. Every discovery in science and every increase in its diffusion adds to their strength.

"One fundamental difference between them and the adherents of supernatural religion lies in the distrust of human nature and its capabilities entertained by the latter. They regard the supernatural portions of Christianity as the basis which sustains its morality, and as the sole foundations of government, law, and subordination. Their chief efforts are therefore directed towards impressing deep and sacred convictions of these doctrines on the public mind, and in their pulpit teaching, the natural world with all its harmonies, adaptations, and laws, is too little brought into view, and many of them stoutly deny that it is adapted for the practice of the Christian virtues.

"The Governments of Europe have adopted the views of this class, and laboured to give effect to them. It has been a maxim with sovereigns that the throne and social order have no secure foundations except in Christianity viewed as a supernatural revelation, and under this conviction they have wedded the State to certain forms of doctrine, and invested those who profess to be believers in them with special privileges, bestowed on the clergy large emoluments, and heaped pains and penalties and disabilities on dissenters of every shade. The real motive of this proceeding was to maintain the throne and social order in security. But the sovereigns early discovered that the Bible itself is not sufficiently precise and systematic, and that without the aid of interpreters it does not exercise a strong influence on the public mind; and they therefore selected and endowed different interpretations—in one country one creed, and in another another, the preference of the creed in each case being given more from accidental circumstances than from any superiority in the knowledge and sagacity of the individuals who devised it. In this condition the State religions of Europe are now presented to the scrutiny of the philosophical mind, and they are found wanting in that indispensible element of stability—universal truth. Meanwhile the subjects of each State also, especially in Great Britain, have exercised their right of private judgment and interpreted for themselves, whence has arisen a multitude of powerful and conflicting sects, each hostile to the established sect, and many of them at discord with their neighbours. The law prescribes that the belief of the Church of England shall be the faith of the members of the Royal Family, and in this creed the Prince of Wales must unquestionably be educated; but an important question remains for consideration: Should the mind of His Royal Highness be opened in due season to a knowledge of the real state of this all-important subject? Or should he be trained in sincere devotion to his own form of belief, in the conviction that government, civil institutions, morality, and all the ties that bind society together, have no root or foundation except in that form of religion in which he is educated? Or should he be left to discover by slow degrees that all these ties have a far deeper root in the very nature of man, and that the same principles would continue to influence him under an opposite creed? Would it be safe to allow him to learn the existence and force of the antagonistic creeds and opinions only by their shocks against the Established Church and the throne?

"The right solution of these questions depends on the decision of a previous one. Is Christianity as popularly interpreted

the sole foundation of social order, or has God impressed moral as well as physical laws on Creation, and can the welfare of society and the stability of the sovereign power find a secure basis in them? If Christianity be only a republication of natural religion, all the benefits which it has yielded to mankind must have sprung from those portions of it which are conformable to Nature; while, on the other hand, the manifold and intense miseries which it has occasioned to society and individuals can owe their origin only to interpretations of it inconsistent with its real character, or, in other words, with natural morality. It will be difficult much longer to prevent the nature and claims of Christianity from becoming a practical question. The advocates of the supernatural portions of Christianity, each in his own sphere, and each following the lights of his own interpretation (*e.g.*, the Puseyites in England and the Free Church in Scotland), are pushing their pretensions towards an independence, in all things spiritual, of the secular power. The limits of secular and spiritual things are not easily defined, and history shows that religious sects have generally extended their claims of dominion from things of heaven to things of earth, in proportion to their consciousness of power. In every country of Europe the spiritual power is striving to gain an ascendancy over, or at least an immunity from, the control of the civil; and the doctrine that social order, law, and justice rest on a religious, and on no other foundation, not only lends plausibility to, but confers strength on, the clergy who advocate these pretensions.

"With all deference to popular opinion, it appears to me that the idea is fundamentally erroneous that morality and social order depend on mere religious belief, and have no other foundation. St Paul himself teaches the reverse when he speaks of men 'which have not the law,' but who 'do by nature the things contained in the law; these, having not the law, are a law unto themselves, which show the work of the law written in their hearts' (Romans ii. 14, 15). There are in man moral faculties, religious faculties, and intellectual faculties, as well as various animal propensities, each as distinct from and independent of the other as the several senses of seeing and hearing, tasting, feeling, and smelling, and morality and social order rest on the moral and intellectual powers as their basis, while religion springs from, and is sustained by, the religious emotions. There may exist in an individual and in a people strong feelings of morality, say of benevolence, justice, and subordination, with little religion, or there may be found vivid religious feelings, with a very imperfect observance of morality. History, as well as observation in private

life, affords abundant evidence in support of these propositions. The most religious nations and periods have not always been the most just and humane, nor in our own day are the most fervent Churchmen always the most distinguished for scrupulous accuracy in their statements, and for the most just and charitable conduct towards those from whom they differ in opinion.

"True religion and sound morality are always coincident in their dictates, and the character of a nation or an individual is more or less excellent in proportion as both are displayed in their conduct and institutions. All that I wish to express is the proposition that morality and religion spring from distinct and independent sources in the human mind, that the one may exist without necessarily implying the presence of the other in a corresponding degree, and that their objects are different. The object of morality is the establishment and maintenance of law and justice,—in other words, social order on earth. The essential and ostensible object of religion is to secure the happiness of the individual in a future state of existence. Sound morality is an indispensable element in sound religion, but religion is not a constituent element of morality. The *nation* is interested chiefly in a sound morality, the *individual* more directly in a sound religion.

"The throne of the Prince is an institution coincident with the best views of morality. It is the seat of the first magistrate of a people; and the sovereign as the executive power of the state is in fact the representative of all the moral and intellectual qualities by which it is held together, and under the guidance of which it advances in the great path of civilisation. The sovereign, as an individual, should adopt and profess that form of faith which appears to his own conscience best calculated to insure his eternal felicity and to strengthen his moral resolutions, but every one of his subjects has a right to an equally free choice of his opinions on this all-important subject.

"If these principles be sound, the Prince of Wales should early be taught that thrones and social order have a stable foundation in the moral and intellectual faculties of the human mind; that by addressing his public exertions to the cultivation of these powers in his people, and by taking their dictates as the constant guides of his own conduct, he will promote the solidity of his empire and the prosperity of his subjects. In one word, he should be taught that *God*, in the constitution of the mind, and in the arrangement of creation, has already legislated for men, both as individuals and as nations; that the laws of morality which he has written in

their nature are the foundations on which, and on which alone, their prosperity can be reared, and that the human legislator and sovereign have no higher duty than to discover and carry into execution these enactments of divine legislation.

"In following out these views, an important object in educating the Prince of Wales should be to lead his mind from the first beyond conventional and empirical maxims and opinions in morals, politics, and religion, to nature. The first step in such a process would be to communicate to him a sound and practical knowledge of the human mind and body, the objects of their functions, and the laws impressed on them by the Creator. A mere metaphysician, theologian, or classical scholar, unlearned in physiology and natural science, would be unfitted for the duty; while a mere physiologist without mental science would be equally inadequate to the task.

"Classical literature and history, when studied empirically, without the lights of mental, physiological, and economical science, are far more calculated to mislead than to improve and instruct the youthful mind. Every natural passion, and every exaggerated and erroneous sentiment, may in them find excitement and encouragement. It is only when they are brought to the tests of a pure morality and a sound practical philosophy that they become instructive, and then they afford examples of evils to be shunned much more frequently than of good to be obtained by following the practices which they describe.

"The instructor of the Prince should be a man under forty years of age, whose mind is free from subjection to any sect or party, and who is more or less acquainted with all the science of the day. The better he is acquainted with *new* scientific views and opinions, the more suited will he be for his important avocation. In the ages which are to succeed the present, science will influence society far more generally and powerfully than it has ever done; and both literature and religion will act subordinate parts in the drama of life compared with it. This idea, if correct, carries in itself a principle which should never cease to influence the education of the Prince of Wales.

"Mental science is now a department of physiology, and the teacher of his Royal Highness should be capable not only of instructing him in this branch of knowledge, but of directing his own treatment of him by its lights. It would enable the instructor to ascertain, on sure grounds, the natural dispositions and capacities of the Prince in their relative degrees of strength and weakness, and to modify his training according to the dictates of reason founded on that knowledge. In

ordinary education much prejudice, and occasionally some unsound morality, are instilled into the youthful mind by well-meaning instructors who are ignorant of the spheres of activity of the primitive mental faculties. This evil lies in an especial degree in the path of the Prince of Wales. From his high station, his Self-Esteem and Love of Approbation are liable from his earliest infancy to be misdirected, and to be converted into sources of future suffering to himself and annoyance to his people. In him these two sentiments should be trained with so much tact, delicacy, and truthfulness as to ensure, if possible, a nobleness of character becoming his elevated rank, avoiding egotism and a selfish love of power.

"It is reasonable to expect that an instructor who is guided by a scientific knowledge of the human faculties, will be better qualified, other things being equal, to accomplish these objects than one who acts on his individual suggestions alone. In order to fill any social station to advantage, it is necessary that the individual should know both himself and other men. In the humbler walks of life, the most valuable part of this instruction is gained by free intercourse with inferiors, superiors, and equals. In England this school is closed to the heir of the Throne. How superior in their just appreciation of their own condition and of their social duties and relations have those sovereigns generally been who have ascended a throne after having moved in a humbler, say a private sphere? No external circumstances will change the nature of an individual, and some men—Cromwell and Napoleon, for instance—have risen from the common ranks of life to supreme power, and abused their sovereignty; while others, such as Charles II. of England and Charles X. of France, have received the most impressive lessons of adversity without reaping from them corresponding advantages. But assuming the mind to possess average natural qualities, the humanity, the strong sense, the tact and judgment of those sovereigns who have ascended a throne from an inferior station, appears to me to be so conspicuous as to indicate the great importance of their early training. Farther, from the kindliness and truthfulness inherent in the German character, the sovereigns of that portion of Europe at all periods of their lives mingle more freely with their subjects than English princes are permitted by the manner of their country to do, and whether viewed in their private or public capacities, they appear to profit by this advantage. The instruction of the Prince of Wales in a knowledge of the human faculties and their spheres of action may to some extent prove a substitute for that practical training which is denied him."

## CHAPTER V.

1845–1846.—WORK AND CORRESPONDENCE—DR W. B. CARPENTER AND THE PHYSIOLOGY OF THE BRAIN—"THE NEW REFORMATION IN GERMANY"—DEATH OF DR WELSH—COMBINATIONS OF ORGANS—CHARLES YOUNG, THE TRAGEDIAN—TOUR IN BELGIUM—GUSTAV VON STRUVE—ANDERSONIAN UNIVERSITY—A CHAIR OF PHRENOLOGY—DAVID STOW AND THE GLASGOW NORMAL SCHOOL—LONDON IN 1846—HANWELL—DR CONOLLY—BUCKINGHAM PALACE—PRESENTED TO PRINCE ALBERT—RICHARD COBDEN—INFLUENCE OF RELIGIOUS SENTIMENT ON NATIONAL PROGRESS—DUBLIN—IRISH NATIONAL SCHOOLS—PUPILS AND TEACHERS—ARCHBISHOP WHATELY IN EDINBURGH.

THE year 1845 and the greater part of 1846 formed a period of preparation rather than of production with Combe. He was keenly observant of the currents of political and religious thought; accumulating facts and arguments for the educational crusade in which he was soon to engage. But even his repose was full of activity, except when illness staid his hand. His correspondence alone would have supplied work enough for an ordinary man: it had always been extensive, and now it had considerably increased. He maintained a frequent interchange of ideas with Mr M. B. Sampson on currency, American stock, mesmerism, and the natural laws; with Von Struve and R. R. Noel on phrenology in Germany; with Dr John Forbes, Dr Laycock, Professor John Reid (under whom Combe had studied physiology in 1837–38), and Mr Daniel Noble, on the functions of the brain; and his counsel was sought by a host of correspondents in arranging private disagreements and difficulties. Many of these correspondents had very little direct claim on his attention, but whenever there appeared a possibility of setting two people right, he never hesitated to give time and labour to their affairs. His

clearness of judgment had from an early date made him the arbiter amongst his numerous relatives; and as he advanced in life, he found a similar position frequently forced upon him for the benefit of an extensive circle of acquaintances. From the training of a refractory child to the defence of a woman's reputation, his advice and assistance were sought and invariably given. His interest in public finance had been aroused at an early stage of his career as a lawyer; and he had studied the causes of commercial crises with the eyes of a philosopher throughout his life. The investments which he had made in America during his sojourn there had given him a deep personal interest in watching the commercial progress of that country; for the failure of the railway and bank stock in which he had sunk a portion of his capital, deprived him of one-third of the income he had calculated upon when he retired from business. By so much he would have been the richer if he had not visited the United States. But he had faith in the American people; and although about this time there was much talk of war with England, and repudiation of the national debts, he was little disturbed, and outsiders never knew, either by his mode of living or by his complaints, that he had lost, or had any serious stake in the direction of affairs in the States. At home there was marvellous commercial prosperity in 1845, but Combe warned his nephew, James Combe—who was then about to begin business in Belfast—that "the spirit of speculation is so over-active that it is preparing ruin for thousands and suffering for all at no distant day." Two years later his words were verified.

Dr William B. Carpenter had recently published, in the *British and Foreign Medical Review*, an article on Phrenology, of which he subsequently gave a summary in the appendix to a new edition of his "Human Physiology." He granted the possibility of the general proposition that different parts of the brain subserved distinct functions; but stated that the "present system of Phrenology is altogether inconsistent with

well ascertained facts regarding the comparative anatomy and embryological development of the cerebrum." In a letter addressed to Dr Forbes, Dr Carpenter suggested that his conclusions explained the distinct emotional system of the nervous fibres. This letter was forwarded to Combe, and led to a discussion as to the sources of instinctive and emotional actions, and on the connections between the anterior lobes of the brain and the motor column of the spinal cord. There was a fundamental difference in their methods of investigation. Dr Carpenter said that in seeking information from nature—

"I adhere to the principle which has hitherto guided me in my philosophical inquiries—of proceeding from the *general* to the *special;* and until I have satisfied myself, and satisfied those on whose judgment I most rely, that I am right in my conclusions as to the *leading divisions* of the Encephalon, I do not think it worth while to pursue the investigation into the *detailed* localization of the cerebral hemispheres. I have nowhere expressed myself against the possibility of such localization, but merely against the mode in which the *present* phrenological school attempts this."

Combe explains his position thus :—

"It is a fundamental principle of philosophical investigation that all general conclusions should be drawn from, and rest on, *particular* facts. Gall followed this rule ; Carpenter sets it at defiance. For example : by particular observations Gall discovered an organ of Comparison, one of Causality, and so forth, all belonging to the genus Intellect. He found them all in the anterior lobe. His induction from all of these facts is that the anterior lobe is the organ of Intellect. Carpenter, following Flourens, &c., makes no *particular* observations on the functions of particular parts of the brain ; but because the whole intellect disappeared when the whole cerebrum was removed, he concludes that the whole cerebrum is the organ of Intellect. But do you not perceive that when the *whole* cerebrum was removed, the whole anterior lobe was also taken away, and that this accounts for the disappearance of intellect without in the least infringing on Gall's account of the functions of the middle and posterior lobes ?

"Dr Carpenter places the emotions and instincts in the *corpora quadragemina* because, as he says, in comparative anatomy intellect decreases as the cerebrum decreases, and intellect

rises as the *corpora quadragemina* are augmented. But what is Intellect, and what are Emotion and Instinct? He assumes them to be one power or faculty, and compares the size of a whole department of brain with its supposed quantity. But innumerable facts prove that Intellect is not one power, that Emotion is not one power, and that Instinct is not one power, but that there are *many* intellectual and *many* emotional faculties, both in man and animals; and that each of them, in both, has an *instinctive mode of action:* so that in reality, when we are told that the cerebrum is the organ of intellect, without any specification of particular powers, and that the *corpora quadragemina* are the organs of Emotion and Instinct, without the enumeration of emotions and instincts, we are extremely little advanced beyond the general proposition that the brain is the organ of mind."

These extracts will suffice to indicate the positions taken up by Combe and Dr Carpenter. The question at issue had been already dealt with in the "System," page 69 *et seq.* of the first volume, and page 382 of the second, and Dr Carpenter's arguments did not alter Combe's views. Agreement between them was impossible, and the chief result of the discussion was the publication of Mr Daniel Noble's book, entitled "The Brain and its Physiology," 1846. This work was to a great extent inspired by Combe, and partly revised by him; its object was to give an account of the methods of determining the relations subsisting between the structure and the functions of the brain. Its argument was the same as that advanced by Combe twenty-seven years before, that "the wit of man cannot advance a step in the knowledge of the true physiology of the particular cerebral parts, except by the method of Dr Gall;" and it discussed at full length the relations which vivisection, pathological cases, and comparative anatomy bore to this method.

Amongst the miscellaneous occupations of this period to which Combe gave his attention, was the preparation of the sixth edition of the "Elements of Phrenology," and the people's edition of the "Moral Philosophy"—published in April 1846. Besides contributing regularly reviews and

original papers on his favourite subjects to the *Phrenological Journal*, he wrote amongst other articles for the *Scotsman* a series on the "New Reformation in Germany," and on "National Education and the Common Schools of Massachusetts," which were afterwards published in pamphlet form. In the "New Reformation," he expressed his profound admiration of the character of the German people, and directed attention to the rapid progress they were making in education and in liberality of thought. From this intellectual advancement he predicted for them the prominent position amongst nations which they now hold. Prussia had obtained his particular admiration, and he said with delight that there Protestantism was "seriously in the way of being reformed as well as Catholicism."

In the spring of 1845 he spent a few weeks at Helensburgh, with his wife and Dr Combe. The latter had been again dangerously ill, and it was chiefly on his account that the journey was made to the West Coast. Their old friend, Dr Welsh, was living in the same place, and in a very feeble condition. There had been an estrangement for several years between them;—no quarrel, simply each had glided into a different course; and since he had withdrawn from the Phrenological Society, of which he had been one of the originators, Dr Welsh, without declaring against the science, avoided phrenology and phrenologists. On hearing that Dr Combe was in Helensburgh, he asked to see him professionally. The Doctor was too ill to be of service, but he visited him, and the two men who were so near death took leave of each other. On the morning of the 24th April, Dr Welsh was taking an airing in a carriage when he met George Combe, and they exchanged a few words of kindly greeting: in the evening he died quietly in his chair, whilst commenting on a passage of Scripture which his wife had just finished reading to him.

But whilst the early supporters of the science were beginning to disappear, others were stepping into their places, and

Combe had long looked to the rising generation to sustain and carry forward its principles. There were many seekers for light on Phrenology, and whenever they advanced a question which suggested any new way of revealing the truth, he gladly endeavoured to satisfy them. Miss E. Jane Whately (daughter of the Archbishop of Dublin) was one of those, and to her he addressed a series of letters on the combination of organs. The combinations are infinite, and form the most difficult and the most interesting subject of study to the phrenologist. The student at a very early stage of his observations is puzzled by a development which should indicate a particular character of mind, whilst his knowledge of the person assures him that the development and the character do not correspond. He has then to learn the effect of the combinations of organs, and in acquiring this knowledge Combe found that the great stumbling-block, even to phrenologists of some experience, was that few individuals found it easy to comprehend the power of faculties which they did not themselves possess. Thus the man who was deficient in Hope found it difficult to comprehend its influence upon the character of the man who possessed it largely. The following is one illustration of the effect of the combination of large Love of Approbation and Secretiveness with small Conscientiousness :—

"You remark, 'Some people excel in things which they dislike.' I doubt this. In all instances where such persons have fallen under my observation, I was satisfied that there was great affectation in their pretended dislike. It was a left-handed mode of enhancing the estimate of their own superiority. The process was this :—Here is excellence ;—no question of it ; but if this be the result of a merely natural gift, pleasant to exercise, where is its merit ? To represent it as something attained, yet distasteful, adds a new item to its claims to admiration. There is first the excellence, and secondly the merit of having achieved it *contra Minervam.* The beholder *must* wonder and admire in such a case. This is the result of Love of Approbation and Secretiveness *plus,* and Conscientiousness *minus.* Mr Young, the actor, the contemporary of the Kembles, and himself a very finished

tragedian, dined with me one day after he had just terminated his farewell engagement on the Edinburgh stage. His high attainments were the result to an extrordinary degree of study. His acting showed that he had analysed every sentence of Shakespeare, and embodied the minutest shades of his meaning, such as this severe study revealed it to his mind. But he had an enormous Love of Approbation, and wished to be thought an original genius, and not to be indebted to study for his fame. On my congratulating him on his retirement full of health, wealth, and fame, he replied—'Yes, thank you; I have *much* to be grateful for; now I shall have time to *study* Shakespeare!' I looked surprised, and he added—'Yes, to *study* him. I have hitherto acted him, but I must now begin to study him.' This was pure affectation; and I put Cellini's detestation of the flute, in which he excelled, in the same category."

On the 2d July the Combes, accompanied by Dr Combe and their two nieces, Marion and Robina Cox, started on a tour through Belgium and part of Germany. About the end of the month they reached Homburg, and here the Doctor, who depended upon gaining strength during the summer to carry him through the winter in Scotland, expected to find sunshine and a dry atmosphere; but he found rain and cold instead. He was therefore obliged to leave the party, and with his constant companion, Miss Cox, return to Edinburgh, where the comforts of his own home compensated in some measure for the variations of climate. This was one of the few excursions the brothers had been able to make together, and it proved to be the last. Whilst resting at Homburg, Combe read with some interest and a good deal of disappointment the condemnatory article in the *Edinburgh Review* of July, on the "Vestiges of Creation." With more satisfaction he read another article on the life of "Blanco White" in the *Quarterly*. Out of the meditations suggested by these papers was evolved the first definite idea of the work which afterwards assumed the form of the "Relation between Science and Religion." "The way to write a work on natural religion," he says in his diary, 25th August, "would be to begin with Man,

and give a summary of his physiological constitution, bodily and mental; an exposition of his faculties, and the effects of disease on them; and an exposition of the effects of their combinations. Next, a view of the physical world in which man exists; then discuss what Nature tells of God. Lastly, draw conclusions as to practical duties and worship." This subject took firm possession of his mind, and all his previous observations and writings formed the most appropriate preparations for the theories of natural religion which he subsequently announced. He had not conceived the idea of writing a book on the subject; there was only a perception of something which should consolidate and systematise the teachings of the "Constitution of Man" and the "Moral Philosophy" and form the culmination of his life's thought and work. During the next two years the idea was insensibly taking shape, and found its first expression in his pamphlet on "National Education."

At Heidelberg he again met his friend Von Struve, who was now busy editing a daily newspaper, at perpetual warfare with the censor of the press; conducting a score of lawsuits; and also, since the death of Dr Edward Hirschfield in March, acting as sole editor of the *German Phrenological Journal.* The latter was soon afterwards discontinued; for when the first interest of novelty had passed away, the majority of readers were satisfied, and Von Struve was too much occupied with politics to give the time necessary to enforce the claims of Phrenology on their attention. He was as enthusiastic as ever in his belief in the science, and he took a development of Combe's head during this visit (September 1845), which became the text for an interesting explanation by Combe of his own character. The development and the remarks on it will be found in the last chapter of this work. Von Struve's career was a turbulent one. His passion for politics involved him in 1848 in a foolish attempt to establish a republic in Germany, with the aid of a handful of Black Forest peasants. The revolt was speedily suppressed, he was imprisoned,

released during another revolt led by an advocate named Brentano, and after some further attempts to stir up rebellion, he was obliged to take refuge in England. In his exile he declared that his life should be devoted to do battle with the six scourges of mankind, namely, Kingship, Nobility by birth, Bureaucracy, Standing Armies, Clerical Dominion, and Usury. Combe could sympathise with the reforms which Von Struve sought to bring about, but he entirely disapproved of his method of attaining them; for bayonets and artillery could never be made the instruments of moral reform.

The most prominent subject of interest to Combe after his return to Edinburgh was the establishment of a chair of Phrenology in the Andersonian University at Glasgow. The chief instigator of this movement was Mr James M'Clelland, the most indefatigable of the Glasgow phrenologists in all that could advance the science in public estimation. He was one of the Andersonian trustees, and at a general meeting of that body he stated that the trustees of W. R. Henderson were prepared to endow a chair of Phrenology with the annual sum of £50, and proposed the acceptance of the grant. The motion was seconded and carried. On the 24th November he attended a meeting of the Henderson trustees, when Dr William Weir, physician and a clinical lecturer in the Glasgow Infirmary, was appointed lecturer on Phrenology in the Andersonian University. Combe was much elated by this event, and he regarded the day on which the final arrangements were made as a remarkable one in the history of Phrenology. It was the first admission of the science into a chartered university, and as its medical classes were attended by a large number of students, he looked forward to the fostering of an army of practitioners in medicine whose labours should be guided by the principles of Phrenology. He was asked to deliver the opening address on the 7th January 1846, and immediately set about its preparation. Having completed the address he submitted it for revision to his brother, Dr

Combe, who, endeavouring to make it more suitable to a class of medical students, produced an entirely new one. George Combe, on reading his brother's production, at once threw his own aside; and as the Doctor was precluded by the state of his health from attempting to deliver the address, George undertook the task. On the 7th January the hall of the University was crowded with young men, and about a dozen ladies had found places, although contrary to orders. The president, Mr Murray, announced the institution of the lectureship, and introduced Combe. The address gave a brief account of the history of the science, its object, its uses and importance to the medical profession especially. The audience was most attentive, and at the close of the address the president, in expressing the thanks of the managers of the University to Dr Combe and George Combe, requested that it should be printed. This request had been anticipated, and copies of the address, accompanied by letters of recommendation from Sir James Clark and other eminent physicians and teachers, were ready for distribution amongst the members of the class at the conclusion of Dr Weir's introductory lecture on the 9th January. Thus far all appeared to go well; but Combe's hopes were not realised. The prejudice against Phrenology was still too great to make success possible. About twenty teachers joined the class, but they attended with a half-guilty feeling, as if there were something wrong in it, although they could not well say what it was. Mr David Stow, a mill-spinner, and a man of liberal mind, who had attained deserved reputation by his work on school training, and as the mainspring of the system pursued in the Normal School, Glasgow, was shy of taking any prominent part in supporting the new lectureship, although he was a sincere believer in Phrenology.

"In a letter, dated 20th September 1845, to my brother," Combe writes regarding Mr Stow, "he acknowledges that his training, practically, and his book have all along been founded on Phrenology, which he learned first from my lectures in Glasgow, and subsequently from Dr Spurzheim, and that

without it he could not have done what he has accomplished, or withstood the opposition which he encountered. On 25th September he wrote from Dunoon that he had actually prepared for his last edition a chapter stating his obligations to Phrenology, and pointing out its application in education, but was laid under the necessity of omitting it by the opposition which it encountered from those on whose aid the existence of the school depends. It is pleasing to find these instances of substantial good accomplished by the science, although justice is withheld from it in public acknowledgment."

The wealthy are rarely reformers: the world has gone on very satisfactorily on the old lines so far as they are concerned, and they naturally see no reason for attempting to start on a new track. So with the opulent merchants of Scotland in 1845–46; they objected to give their money to disturb the principles which had served themselves, believing that the principles were quite good enough to serve those who came after them. In this way they constituted a drag upon the too ardent spirits of their time, and no doubt had their uses in checking extravagance. Their influence was felt most strongly in the question of popular education, for the mass of teachers, like other mortals, were compelled to submit to the conditions on which their living depended. Consequently, when teachers found that a knowledge of Phrenology, so far from being regarded as an advantage to them in their office, was in most cases a direct barrier to their progress, they ceased to study it. The lectureship in Phrenology was fairly tried for two sessions at the Andersonian University, and then the number of students being so small that perseverance could only bring ridicule upon the teaching, the Henderson trustees withdrew their grant, and the class was closed.

Notwithstanding this failure of a scheme in which he had taken so much pleasure, and on which he had founded some hopes, he was able to say, "I do not feel desponding, although I know that I shall never live to see my doctrines carried out." In other directions he saw light beginning to break; and he wrote:—

"I perceive a decided improvement in the mental condition of the British empire since 1840. Sir Robert Peel has become almost a free trader, the aristocracy are breaking up in consequence of light and science breaking in upon the minds of some of them. I mean that they no longer present that firm phalanx of united resistance to reason, justice, social improvement, and religious freedom which they did a few years ago. The Church of England also is splitting, and the public press is speaking more boldly against fanaticism and intolerance. I mentioned the 'Vestiges of the Natural History of Creation' in a late letter to you. The book has had a wonderful sale; the third edition was bought up in one day, and a fourth is now preparing. Its wide diffusion is an indication of the bent of the public mind towards more rational views in religion, because its grand themes are development of all organised beings out of inorganic matter, and the formation and government of the world by general laws. The author is still unknown."

In April the Combes visited London, and after spending ten days with their nephew, Dr Abram Cox, at Kingston-on-Thames, the time being chiefly occupied in studying the pictures in Hampton Court, they stayed a few days with Sir James Clark, and then took apartments at 11 Old Quebec Street. His observations on London in 1846 reveal transitions in social ways which were in Combe's eyes the signs of changes in higher matters.

"We saw a good deal of society in London, and were struck by the diminution of aristocratic feeling, and the increasing ascendency of reason, since our last visit in 1840. Omnibuses abound to an extraordinary extent; every three minutes, *three* in close succession are seen running along Oxford Street without intermission from seven or eight in the morning till long past ten at night, and people of some consideration now use them. We dined with Sir James Clark on the day of our departure for Scotland, and ordered the Blackwall omnibus to call at his house for us at 8 P.M. to carry us to the ship. Mrs Combe said in joke to Lady Clark—'I suppose we should apologise to you and Sir James for desecrating your door by ordering an omnibus to draw up at it.' 'Not at all,' replied Sir James, '*my* dignity is quite safe, for the omnibus draws up at Buckingham Palace!' This, he said, is a literal fact, and is a great change. Of course it does not draw up at

the chief entrance, but not at any back door either, but at the end door of the wing fronting the open place before the palace, and in the public eye. Hired carriages with one horse, 'Brougham's,' and 'Clarence's' are now admitted into all the parks, and people of fashion go out to dinner in street cabs at a fare of 8d. the mile! A lady who has kept a pair of horses these fifty years told me this herself. When her horses have been out all morning and cleaned and put up, rather than dirty them and the carriage again, she called a Brougham from the street and went to dinner in it. Even a few years ago this would have been thought *infra dig.* The same change goes much deeper. Mr Cobden has taught the public and the peers the power of reason in the Corn Law question, and demonstrated that it is more than a match for aristocracy and political partizanship combined. The peers have openly avowed that they consider themselves bound to yield in their legislation to the public voice when deliberately and unequivocably uttered. Add to these cheering symptoms, our Free Trade principles now practically realised (or on the very eve of being so), our extraordinary railway prosperity (for it is only the speculators who are bit by them), and the general activity of all branches of industry, and I may safely say that I have never known England and Scotland, morally and physically, in a more promising condition. Ireland continues as wretched as ever, and I can scarcely conceive what will improve her condition. Her population is sadly deficient in some of the highest moral and intellectual organs; and truth and reason and consistency are practically unknown in the conduct of her leading men. Still she has been, and continues to be, egregiously wronged by England; but when all these immoralities and sufferings will terminate, God only knows."

Combe was received everywhere with respect; engagements for every day and evening were poured in upon him, and the excellent health which both he and his wife enjoyed at this time rendered the visit to London most agreeable. He had opportunities to discuss politics with Mr Cobden, Joseph Hume, and Baron Van de Weyer; statistics with Mr J. R. MacCulloch; the management of criminals with Captain Maconnochie; art with Mrs Jameson; phrenology with Dr Forbes, and sanitary questions with Mr Edwin Chadwick. From Mr Deville he learned that Phrenology was making satisfactory

progress in the metropolis, notwithstanding the divisions amongst its disciples; but this statement was not borne out by the dissolution of the London Phrenological Society, which took place that year. As was his custom he visited the principal institutions, and amongst others Hanwell. There Dr John Conolly was attempting to carry out the humane system in the treatment of the insane, so strongly advocated by George and Andrew Combe in their earliest works. The following extract from Combe's diary will show the difficulties with which Dr Conolly had to contend:—

"*9th May.*—To-day I paid a most interesting visit to Dr Conolly at Hanwell, and saw the most gratifying proofs of the extent to which enlightened benevolence is capable of alleviating human misery, even in very unfavourable circumstances. He complains much of the county magistrates having opposed and thwarted his plans under, he believes, on their part, the conscientious conviction that he was about to produce evil. They suppressed a school for the patients because it cost about £120 per annum, and limited many others of his projects of improvement. They do not allow him the appointment and dismissal of the servants and subordinate officers, and in consequence he has often much to endure from these functionaries preferring brute force to self-restraint and mild treatment. Still, with all its disadvantages, Hanwell is a model asylum. The great lesson is taught here, that by honouring humanity even in its lowest forms and conditions (in the pauper-idiot, and insane) it may be improved, and that it may be rendered comparatively cleanly, orderly, quiet, tractable, and useful. The *honour* shown to it consists in uniform kindness, the table being covered with a clean white tablecloth, and the plates, knives, and forks being all respectable; in the chief of each ward saying grace before and returning thanks after dinner; in the keepers saying, 'Gentlemen, please take your places,' &c. The quiet orderly conduct of the men corresponds with their title of 'gentlemen.'"

The Combes, amongst other old friends, met Charles Kemble. He was extremely deaf, living in the Hummums, solitary, deserted by all his children, very unhappy, and loudly expressing his discomfort. "One's sympathies are touched to see the last of the Kembles so forlorn and so poor. But he is not

deserted by the world. He dines out and drinks claret, of which he is very fond, four days in the week."

The event which rendered this sojourn in London most memorable to Combe was his visit to Buckingham Palace, where he was presented to Prince Albert, and was for the first time permitted to examine the phrenological development of the Princess Royal, then about six years of age, the Prince of Wales, four years and a half, the Princess Alice and Prince Alfred. In subsequent years he was called upon to repeat the examination, and his views as to the course of education best adapted to the faculties of the Royal children, and of the qualifications necessary in their instructors, obtained consideration. On this occasion he simply pointed out that there were great differences in the brains of their Royal Highnesses; that no general principles of training and education would suit them all, and that even a knowledge of the characteristic traits of one would not be a guide to those of another; but that a modified treatment would require to be applied to each; and that the preceptor should be a person acquainted with the faculties of each, and with the objects suited to repress or excite them, so as to train and enlighten them all.

The Combes returned to Edinburgh in excellent spirits, and for the next two months they lived so quietly that there was no news to communicate even to Dr Combe, who was then at Kingston-on-Thames. There was a deep vein of sentiment in Combe's nature, partly due to large Benevolence, which influenced all his work, although it rarely rose to the surface, and was never visible to mere acquaintances. It combined, with his faith in Phrenology and the natural laws, to make him tolerant with those who opposed him, merciful to those who erred, and directed his theories for the treatment of the insane and the criminal classes into the humane channels of kindness and reason as opposed to physical force. The following trifling incident, and the attempt at verse-making, afford a pleasing illustration of this phase of his character:—

10*th June.*—Ther. 65°. The west end of Melville Street is overgrown with long grass and dandelions, in consequence of the absence of thoroughfare. I have been for some days contemplating an application to the police to clear them away; but to-day a group of poor children from William Street streamed past me in great glee, calling to one another, "Come, and see my garden"—"Hey, come and see mine." I wondered where *their* gardens, poor dear ragged creatures could be, and watched them. They ran to different parts of the overgrown pavement, and one pulled half a dozen of dandelion flowers from one part, another a few from another, and then they met and compared them, and disputed whose garden produced the prettiest flowers. They actually revelled in pulling them, and in admiring the long graceful stalks and heads of the wild grass which grew between the stones. I was deeply touched by this simple incident. I saw in it a beautiful example of the adaptation instituted by God between the human faculties and the physical creation, to afford pleasure to man; and I could not help lamenting that these poor children enjoyed such stinted draughts of this pleasure. All idea of clearing the street of the vegetation was instantly expelled from my mind. I was tempted to put together the following lines:—

THE "FREE KIRK" ON THE GREEN.

Will you go, lassie, go,
To the Free Kirk on the green?
There grace and gospel grow,
And nae deevil daur be seen.

There doff your dirty rags o' sin,
And don the robes o' grace;
Wash out your heart as white's your skin,
As sweet's your bonny face.

Fear neither deevil, hell, nor flame,
But dance the livelong day;
Come, gie's your hand, nor think it shame,
To love as well as pray.

The news of the final repeal of the Corn Laws, and the resignation of Sir Robert Peel, reached him about the end of June, and Combe felt that, although seventy years had elapsed since Adam Smith had first demonstrated the

advantages of Free Trade, the fact that the nation had at length adopted the principle was a guarantee that other important truths would in their season prevail. To the devotion, perseverance, and self-sacrifice of Richard Cobden, he gave the entire credit of this triumph, which he regarded as the beginning of a new era in the world. But now he was anxious about the health of the chief apostle of Free Trade, and in writing to him on that subject he referred to the obstructions placed in the way of progress by evangelical teachers. This was Cobden's reply :—

MANCHESTER, 1*st Aug.* 1846.

I have returned with my wife to this place to make a few private arrangements, and we leave this evening for London, where we shall remain only a day or two, and then proceed by Dieppe to Paris. I shall make no calls on anybody, excepting Sir James Clark. You will readily appreciate how difficult I find it to *face* my friends under present circumstances. It is not now my intention to go to Egypt. In fact, I hardly dare tell you what has been brewing in my brain whilst in Wales. All sorts of projects for agitating every statesman of the Continent. Positively, I expect before I get back to pay a visit to almost all the capitals of Europe. I dare say you will shake your head, but I am possessed with an idea, and can't help myself. However, I will talk my plans over with Sir James Clark. Now, my dear friend, I thank you heartily for your kind letter. I had remembered your views upon a man's social duties, which, like every word you have penned, comes home to my moral convictions. I *must* do as you advise ; but I confess, like the poor apothecary, *my poverty and not my will consents.* With reference to your remarks as to the evangelical dissenters and religionists generally, and their views of your philosophy of morals, I will confess to you that *I* am not inclined to quarrel with that class of my countrymen. I see the full force of what you urge, but am inclined to hope more from them, *in time*, than any other party in the state. Gradually, and *imperceptibly to themselves*, they are catching the spirit of the age, so far as to recognise the moral laws as a part of our natural organisation. They do not accept your views to the superseding of their own, but like geology, your science is forcing its way alongside of preconceived ideas, and they will for a time go together without

perceptibly clashing. You and your brother have cast a pebble upon the still waters, and circles will expand with time and experience. I do not quarrel with the religionists, for I find them generally enforcing, or at all events recognising, and professing to act upon (they do not, I admit, sufficiently preach it) the morality of the New Testament, and you can do no more. The only difference is, that John Calvin and George Combe act upon different theories, and rely upon different motives, and start from very different premises, but they recognise the self-same ends, secularly speaking, and I cannot quarrel with either. Now, my dear sir, I am by nature a religionist. I was much struck with your remark, when you mapped my head eleven years ago—"Why, if you had been born in the Middle Ages you would have made a good monk, you have so much veneration!" *That* was a triumph for Phrenology, for you could have formed no such notion from anything you had seen or heard of me. I have a strong religious feeling, a sympathy for men who act under that impulse. I reverence it as the great leverage which has moved mankind to powerful action. I acknowledge that it has been perverted to infinite mischief. I confess it has been the means of degrading men to brutish purposes, to the worshipping of reptiles, the building of pyramids, but it has also done glorious deeds for liberty and human exaltation, and it is destined to do still better things. It is fortunate for me that, whilst possessing a strong logical faculty, which keeps me in the path of rationalism, I have this religious sympathy which enables me to co-operate with men of exclusively religious sentiments. I mean that it is fortunate for my powers of usefulness in this my day and generation. To this circumstance I am greatly indebted for the success of the Free Trade struggle, which has been more indebted to the organ of Veneration for its success than is generally known. Take an example. Last Sunday, whilst on my travels, I met at church with a very rich and influential man from a northern county, who was also on a tour with his wife. He called on me at the hotel the following day to felicitate on the success of our Free Trade struggle. He had joined the League seven years ago, whilst he was high-sheriff of his county, and amidst the gibes and regrets and remonstrances of his neighbours and friends. He told me with tears in his eyes that he gloried in the part he had taken, in a cause which was calculated to *benefit the poor*, and to spread *Christianity through commerce*, over the world. He avowed to me what confidence he felt in *me* from the moment he learnt that I was a churchman.

Now this most excellent man was moved into our ranks, was moved to make contributions of several hundred pounds to our fund, solely by his religious feelings, and nothing else would probably have sustained him in the sacrifice of social standing which such a course involved. He is the type of a class of men spread throughout the land who were necessary in the present state of society to the success of our efforts. I am not without hopes that if I am spared to return in health to this country, the same fortunate circumstance in my organisation may enable me to co-operate efficiently with the most active and best spirits of our day, in the work of moral and intellectual *education*. I could insist upon the necessity of secular teaching and training without wounding the religious prejudices of any man, excepting the grovelling bigots, whether of the High Church party or the opposite extreme, against whom I could make war in the same spirit, which has, in the case of the corn monopolists, enabled me to deprive them of the pretence for personal resentment, even in the hour of their defeat and humiliation. I have said that I have a strong feeling of sympathy for the religious sentiment. A feeling so great that I have sat in a Welsh chapel, listening to a ranting sermon, not a syllable of which I understood, and watching with *pleasing* excitement the effects upon the countenances of the hearers; their glistening eyes, and compressed lips, and stretched out heads, were eloquence enough in themselves for me! But I sympathise with all moral men who are not passive moralists. Especially do I sympathise with those who labour and make sacrifices for the diffusion of sound moral principles, and therefore it is, my dear friend, that I am possessed with a yearning towards yourself, and make you, in this strange papistical fashion, my father confessor! Whilst upon my knees at the confessional I will own, however, that it is unpleasant to my feelings to associate with those who, whilst they indulge in coarse sceptical allusions to our faith, do not, in their private lives, manifest that they impose a better restraint upon themselves than is to be found in the New Testament. My active public life has sometimes thrown me into such company, and with these *esprits forts*, as the French call them, I have no sympathy. My maxim is, in such predicaments, to avoid theological discussions (here again is my Veneration overreaching Causality), and to avoid that I am resolved to follow Bonaparte's advice—to adhere to the religion of my mother, who was an energetically pious woman. Now, my dear sir, I get up from my knees again. What an odd subject to enter upon, in a letter written in the

confusion of packing, with my wife running to me every five minutes to consult about a shirt, a flannel waistcoat, or to assist her to find a missing key for a travelling trunk! However, you are not a severe critic with me. Whilst I think of it, let me say that I hope you will not scruple to let your excellent brother see any letter of mine to you. I consider you *twain as one* in all that I have to write to either. My wife joins me in kind wishes to Mrs Combe and yourself. We hardly know where we shall go beyond Paris, but we must of course try to see Italy on our way first during the winter. I have a hankering after the hot baths of the Pyrenees. But I shall have a long talk with our good friend Sir James Clark.—Believe me ever, my dear Sir, faithfully yours,

RICHARD COBDEN."

From North Berwick, where he was staying for a month with his wife, Combe answered the preceding letter on 13th August:—

"MY DEAR MR COBDEN,—Your letter of the 1st August, communicating your views of the state of mind of the evangelical dissenters and religionists generally, was exceedingly interesting and instructive; because not only are the facts valuable, but they are such as I have great difficulty in reaching, except through yourself. Accept of my best thanks for them, and also for your 'confessions' as to the power and activity of your own 'Veneration.' Far from wishing that organ less active in you, I regard it as one grand element in your success. Another enviable quality in your combination is the moderate size of your Self-esteem. The relative size of these two organs has enabled you to act towards all men with so little of Self-pretension, and so much of deference and respect, that you opened the hearts and understandings of all hearers to listen to and receive the communications which you addressed to their Causality and Conscientiousness; and I can, in all sincerity, assure you that never in my day have I heard a public agitator so universally approved of as you have been.

"I concur in every word you write concerning the great influence of the religious sentiment and religious people on national progress. I have long regarded them as the only moral power in the State. The men of literature and science, the regular politicians, and the men of mere wealth and station, are generally blind to the law of the moral world, and unbelievers in their existence and efficacy as operating in-

fluences for good or evil on human society. They recognise the advantage of personal morals, but have no just idea of the paramount importance of the moral law on social and national happiness. The religionists, on the other hand, are conscious of that importance; they seek to purify the heart and affections, and to give to the whole faculties of man a high moral and religious aim and direction. They *act* on their principles with the most admirable zeal, energy, and perseverance. But in proportion to the greatness of their efforts is the evil which arises when these are ill directed, and it appears to me that evangelical religion, in its principles and effects, is a grand and injurious misdirection of the moral and religious sentiments of the people, and as such highly obstructive of the public welfare. Its evil influences are checked, and have long been mitigated by the common sense of its professors. The English mind is much more practical than logical; and hence orthodox men are capable of sincerely entertaining religious opinions, which, if logically acted on, would lead to evil practices, but which they do *not* follow out; on the contrary, they place them in the category of merely speculative notions, abandon their consequences when these are contradicted by common sense, and do much practical good in spite of their erroneous belief. This, however, is throwing to waste one-half of the active and most elevated powers of the human mind, instead of combining them in one harmonious direction. The fundamental error appears to me to lie in their seeking the basis of religion in the supernatural instead of the *natural.* The sentiment of Veneration is by them directed into the region of the supernatural, in regard to which no two nations and scarcely two individuals agree, while it is withdrawn from the natural, through the agency of which alone can happiness be reached, and concerning which general agreement *is* possible; and hence, as I have said, the enormous waste of religious, moral, and intellectual power."

After a short account of his own evangelical training, and the difficulties he had encountered under it, he proceeds:—

"Here is a 'confession' to place beside yours! Allow me to complete it. After I saw clearly the system of divine administration of the world through natural laws, instead of clashing and discordant sentiments, I attained to harmony and peace of mind. Instead of looking only to heaven to find God, I saw him in every institution of nature. I heard his voice, and saw his power, wisdom, and goodness in me and

around me; my Causality and moral sentiments were reconciled, and this was not a mere speculative belief. I felt myself living every moment in the presence of God; and this state of mind is my constant experience and delight. Twenty times a day death is present to my thoughts, and even in my happiest moments I contemplate it with satisfaction, without any reference to a future state whatever, as a mere demission of this mortal body when its powers of usefulness and enjoyment are exhausted. Every step I advance in the knowledge of nature and of human life deepens the impression of the incalculable good effects which the sentiment of Veneration could produce were it employed to rouse the other faculties to seek out God in nature, to discover His will, and to enforce on them the necessity and advantage of obeying it. In such a worship the Veneration of the profound thinkers could participate. They would become the leaders and pioneers of new views of divine grace; and the pulpit would become the glorious fountain of practical truth, devotion, justice, and humanity, with exhaustless stores of knowledge for the intellect, and glowing themes for the sentiments."

Combe, in his articles upon "Capital Punishment," earnestly opposed it. He regarded the penalty of death as morally, physiologically, and practically unnecessary, and argued that it had the tendency generally to excite to deeds of violence much more than to repress them. It was the same argument, enlightened by experience and observation, which as a youth he had advanced at one of the Edinburgh Young Men's Debating Societies. He wrote the text of the petition to the local members — Macaulay and Gibson Craig — to support the motion of Mr Ewart in the House of Commons for the abolition of capital punishment. Mr Cobden told him this story. Sitting beside J. W. Fox at a public meeting held in support of Mr Ewart's bill, some speaker defended executions on the ground that the criminals were at the time brought to a fit state of preparation for eternity. Fox whispered to Cobden: "Why, if that preparation were real, —if the men were really converted into such excellent Christians,—instead of hanging them, they should make bishops of them!"

In September the Combes went to Ireland to visit their friends, Mr and Mrs Richard Carmichael, at Victoria Castle, Dalkey, and, afterwards, Mr Thomas Hutton, Glen Park, near Dublin. Combe's former impressions of the character of the Irish people were confirmed; the land was still poorly cultivated, and much poverty and dirt prevailed in the city and country. He had corresponded with Archbishop Whately for fifteen years, and he now met him personally for the first time. "He is now an old man, tall and thin, and is afflicted with some irritability of nervous fibre, which renders it impossible for him to sit still. He tosses his legs and arms about, rolls on his chair, and is in a state of constant fidgetting." The Irish National School system attracted Combe's special attention; and one of his first acts was to examine the books used in the Dublin schools. He found them good, but he suggested that one book should be added to the series, namely, one which should teach the children to observe things that exist—which is the basis of all exact thinking and correct reasoning—and also show them the uses or applications of the knowledge they were taught. For example: there was a good outline of chemistry, but no application of it was made to the purposes of baking, cookery, economy of fuel, or any other domestic or artistic use: there was a good outline of physiology, but no application of it to health. He considered that the knowledge thus taught was unfruitful and soon forgotten. One-twentieth of the pupils might attend advanced schools, where they would learn these applications of their knowledge, but the nineteen-twentieths who did not do so would lose all the advantages of their previous labours. He observed that "the *use* of knowledge is scarcely anywhere taught as it should be." In conversation with Mr John Macdonald, one of the commissioners of the National Schools of Ireland, he learned the following facts:—

"No efforts are made by the Board of Education to induce any one to set up a national school; they receive applications

when voluntarily made, and grant assistance under certain conditions. There must be at least thirty children in regular attendance to authorise them to act. The Catholic priesthood are the chief promoters of the national schools, and their efforts do them great honour. Some of them have contributed large sums from their own pockets, considering their poverty, to build schools; and they draw large contributions from their flocks—their miserable state, also, considered. I inquired into their motives. 'They are men,' said Mr Macdonald, 'and some of them act from pure love of their people; *many* do so; and others see that the Protestant population, from having schools of their own, are advancing ahead of the Catholic in intelligence, and they patronise the schools in self-defence.' But they wish the education to be limited to the *elements* of knowledge; they and O'Connell fear science and the higher branches of instruction which would set the people to think; and hence their opposition to the new colleges, and in some points to the national schools."

He saw 600 children of the poorest class collected in the National School in Dublin, and whilst he was impressed by the success which attended the instruction given to them—"they showed real knowledge, and no parotting"—he did not think their brains belonged to a high class. "The children present a large mass of brain in the base; many of them deficient, few of them above moderate, moral organs, but with rather well-developed intellectual organs; and, on the whole, sanguine, bilious, and nervous temperaments, with a very small number lymphatic. In their singing, their low organisation became very evident: the hard ringing scream of Destructiveness pervaded it to a disagreeable extent; and even in the singing of the advanced girls, or young women, the same quality was by far too prominent." In the majority of the teachers he observed the same class of head as that of the scholars—good intellect, but the moral organs low, and a large base. All this supplied him with valuable materials for reflection, and a few weeks later, when inspecting the Edinburgh schools with Archbishop Whately, and comparing the system pursued in them, and its results with those of the

Dublin schools and the Glasgow Normal School, he felt ashamed that Edinburgh should stand so much below them as it did. The deficiencies which he observed in the Irish head he attributed partly to the depressed conditions under which the people had been living for centuries. One of the wrongs of the people was pointed out to him by Dr Whately :—

"In talking about cathedrals, the Archbishop said that he had taken an utter dislike to them since he came to Ireland, and wished all of them in this country burned. I expressed my surprise, when he remarked, 'They are irritating monuments of injustice. The Catholics know that they built them, and that they were wrested from them by violence; they regard them as their own still; and the bitterness and sense of wrong which they keep burning in the national mind is a terrible evil.' He added that he had been told that the Catholic Archbishop of Ireland is actually consecrated to his office in St Patrick's Cathedral to this day! A party of Catholics go as strangers to see it, and so many of them carry the vestryman up the spire and keep him there while the rest perform the ceremony. They go early in the morning, when no other visitors come. 'Be this true or not,' he said, 'the common people believe it, and it keeps up their attachment to their own faith, and adds to the feeling of injury from the Protestants.' There is a volume of truth in these remarks, and to hear them made by a Protestant Archbishop was delightful. The honest and good man there triumphed over the priest."

He tells one anecdote of the effects of an optical delusion on a superstitious nature, which is amusing :—

"An old lady, an acquaintance of Mrs Carmichael's, removed to a new house in Dublin. Nelson's monument stood to the south-east of it. On a cloudy evening it happened to be full moon; and just as the moon had got behind the figure of Nelson, the old lady happened to look out from the window. At the same moment the clouds opened, and showed her the figure of the hero full drawn on the face of the moon. She fell on her knees and prayed aloud, calling for the other persons in the room to come to her assistance. On her knees, with uplifted hands, and in a hollow voice she exclaimed,— 'O Lord God Almighty, thou hast vouchsafed to show me the man in the moon! O Lord, I am a miserable sinner, and

unworthy of thy consideration!' Here the other inmates recognised the real nature of the apparition, burst into loud laughter, and helped the lady to rise from her devotions."

On the way home the Combes rested for a couple of days in Glasgow as the guests of Mr James M'Clelland. Their next excursion was to one of Combe's earliest friends, the late Miss Stirling Graham, at Duntrune, and this completed their wanderings for the year. The directors of the Philosophical Institution—a new name for the Philosophical Association, which sprung out of Combe's lectures on Education in 1835—invited Dr Whately to attend their annual soirée in November, and when he arrived in Edinburgh he spent much of his time with Combe. There were some of the distinguished citizens much amazed to see an Archbishop driving about the city with the author of that "infidel" book, the 'Constitution of Man.' The heterodoxy of the work still pursued the man. "I am conscious of living habitually in the presence and under the law of God," he said, "and I think more frequently of death than I do of my dinner, yet I am called a man without religion!" Another example of the continued opposition to the book was afforded by the fact that while it was used as a text-book in many schools of America, and in the prison of Sing Sing, Mount Pleasant; and while the school edition in German (compiled by George Hülle, from Dr Hirschfield's translation of the complete work) had been, with the approbation of the Prussian Schul-Rath, circulated among the schoolmasters on the Rhine, the English school edition lay on the publishers' shelves, apparently of no more value than waste paper.

# CHAPTER VI.

1847-1848.—EDUCATION—PHYSIOLOGY THE SCIENTIFIC FOUNDATION OF MORALS—"REMARKS ON NATIONAL EDUCATION"—IMPORTANCE OF RELIGION TO SOCIETY—"GODLESS" EDUCATION—WHY HE COULD SPEAK PLAINLY—"THE RELATION BETWEEN RELIGION AND SCIENCE"—LETTER TO MRS WHATELY—DIFFICULTY IN DEFINING SECULAR EDUCATION—THE GOVERNMENT SCHEME—THE MANCHESTER MOVEMENT—"WHAT SHOULD SECULAR EDUCATION EMBRACE?"—RECEPTION OF THE PAMPHLETS—THE GOVERNMENT OF THIS WORLD REVEALED—FIRST SOIRÉE OF THE GLASGOW ATHENÆUM—THE LIBERAL CAUSE—CHARLES DICKENS.

"ANOTHER year is begun and finds us all well" is the first sentence in Combe's journal for 1847; and what follows shows the habitual reverence with which he thought of God and time. "May we gratefully employ it in teaching and obeying the Laws of that Great Being who has made us the intelligent recipients of so many enjoyments, and provided for us so noble a field for the exercise of all our powers. Time tells us that our days are rapidly contracting. In a few years more *certainly*, and in a few weeks or months possibly, I shall cease to live! So be it! Death cannot change the character of God. Whatever He has appointed to me I embrace in the full confidence that it is administered in benevolence and justice. He is present in all space and all time, and I am safe in His almighty care."

Education was the subject which now almost continuously occupied his thoughts, and all his works led up by natural steps to the practical issues to which he desired to attract attention. In the "Constitution" and the "Moral Philosophy"

especially, his aim had been to illustrate the principle that "the laws God has impressed on man are the keys to the right understanding of his rule." He regarded physiology as the primer to all knowledge, and endeavoured to show that it formed the only scientific foundation of morals. He traced the origin of pauperism and crime to physiological conditions of brain; and showed that in the treatment of these evils physiological principles are our best guides. In like manner, in dealing with the regulation of the hours of labour, and of amusement, and in the direction by reason of the general habits of our lives, his aim had been to show that physiology was the light which would most clearly illuminate our path. By this light of physiology he read God's order of Nature, and he desired to see a thorough system of national education based upon it. With this object in view he wrote his "Remarks on National Education," published as a pamphlet in November 1846, and reprinted in the *Phrenological Journal* for January 1847. In this essay he took stronger grounds against orthodoxy than he had hitherto ventured on. He believed that the public mind was keenly alive to the necessity of obtaining some settlement of the education question, and he urged Mr Cobden to give to it some of the energy which had successfully swept away the Corn Laws. Sectarianism was the stumbling-block which lay in the way of any truly national system of education, and Combe found that many liberal-minded men, as well as the Government, were inclined to concede too much to it. In Ireland, where religious animosities attained their highest pitch, the Government had carried out a scheme of education free from sectarianism, and with this experience to guide them he could not understand why they should hesitate to confer the same benefit on England and Scotland.

The argument which he advanced in the "Remarks" was, that it is the duty of every individual to acquire such instruction as may be necessary to fit him for the discharge

of his duties as a member of the community in which he lives, and that Government has a right to *compel* him to acquire this knowledge; but in all beyond this the individual has a right to determine what he should or should not learn. The kind of instruction which he desired the people to acquire was that which relates to God's laws and mode of administration of man's temporal condition; and he would exclude all instruction in the doctrines of sects. He desired to leave theology to priests and guardians, but he would teach the morality of God's natural laws as revealed by science. In this programme he did not exclude religion; but he did not call "dogmas elaborated by fallible men out of their own imaginations, religion." He explained his position thus :—

"I recognise explicitly the importance of *religion* to the welfare of society and to that of the individual. Active religious feelings dispose a man to venerate and submit himself to those moral and physical laws instituted by the Creator, on which his own happiness and that of society depend. They prompt him also to adoration and gratitude, emotions highly influential in the right ordering of human conduct. But under the head of what is generally called religion, are included doctrines and precepts which God has already forced on our acceptance by the clear order of Nature in this world, and other doctrines of which the human understanding, unenlightened by revelation, is incapable of gaining a competent knowledge. In regard to the former, Nature and Scripture coincide, and speak one and the same language; whereas Nature is silent, or so obscure as not to be practical, in regard to the latter. It appears to me that government, as a secular institution, has a right to insist that its subjects shall be instructed in every species of knowledge, and trained to every mode of action which directly affects the welfare of society, and which is prescribed as a duty equally by Scripture and by the natural laws of the body, of the mind, and of the external creation."

He was aware that the system which he advocated would be charged with infidelity, and it was at once dubbed "godless education." But he provided for the teaching of doctrines to the children of each sect, according to the views and wishes of

their parents, at separate hours by such teachers as they might approve of; and it was an abuse of terms "to call that education 'godless' which refers *all* that it teaches directly to the power, wisdom, and goodness of God Himself. In no sense of the words is the study of natural knowledge and its practical applications a 'godless education;' because it cultivates, trains, and enlarges the self-same faculties by means of which the grander doctrines relative to man's future destinies must be studied and apprehended." He maintained that—

"An important use of the religious sentiments is to lead men to study, venerate, and obey God's secular institutions; and after they have done their duty in this department, they may be legitimately employed in expatiating in the fields of eternity."

He sketched the work and progress of the Irish National Schools from 1833 to 1845, and in conclusion he directed attention to an important point which had not yet been generally considered, namely, the relation in which science stood to the prevalent standards of religious belief. Although inquiry into this subject had long been shunned by men of science and by theologians, he regarded it as lying at the threshold of all sound legislation on secular education, and he took it up boldly in his next pamphlet "On the Relation between Religion and Science." This pamphlet was published in April, a second edition was issued in a few months, and the entire essay was also reprinted in the *Phrenological Journal* for July 1847. The charges of infidelity were renewed against him loudly in private circles, but for the present the evangelical press remained silent. In this instance, as in others, he discovered that he had had the courage to utter the thoughts which many men cherished secretly; and there were some who even declared that the principles he advocated would become the foundation of a new religion. He felt under an obligation to publish what appeared to his

own mind to be truth without shrinking from the consequences; and there were many who, whilst repudiating his doctrines, respected his sincerity. To one of the latter he wrote:—

"It gratifies me that you can respect my plain-speaking. Two circumstances render it easy for me to speak so—*First*, I have a very deep and sincere conviction of the truth and utility of the doctrines which I publish. No religious martyr ever held his faith more purely and firmly than I hold my own convictions; and in publishing them I am availing myself only of that 'Christian liberty' which the Reformation gave to all Protestants. *Secondly*, During twenty-eight years the vocabulary of ridicule, virulence, and abuse has been exhausted in order to crush me, and I have lived unscathed by it all. Like the veteran soldier who has escaped unhurt from fifty battles (and I knew an old admiral who had escaped from sixty-three), I hear the cannonade of passion and prejudice with a feeling that it cannot reach me."

The views which he advocated in the "Remarks on National Education," and "the Relation between Religion and Science" are explained in his reply to a letter from Mrs Whately regarding the first named pamphlet. The date is 9th February 1847.

"You say 'we therefore view natural religion as in point of fact derived from Scripture, not Scripture from it.' I have not said that Scripture is *derived* from natural religion, but only that its practical precepts concerning human conduct in this world must be supported by the order of nature, otherwise that they cannot produce practical fruits. But natural religion itself appears to me to be derived from nature and not from Scripture. I shall endeavour to explain my meaning.

"We both agree that a great, intelligent, and benevolent Being made this world and all that it contains. He appears to me to have bestowed on Man organs and faculties of Veneration, Hope, and Wonder, which constitute him, *by nature*, a *religious* being, just as certainly as Destructiveness renders him a carnivorous creature. He has bestowed on him organs of Causality and Comparison, which render him cognisant of *design*, when presented in external objects, and capable of forming and executing designs himself.

"Now, I regard the external world as designedly adapted by God to the human mind and body, and as containing within itself (by this Divine appointment), objects and relations addressed to, and intended to rouse, excite, and gratify *all our faculties.* In short, I recognise God—His adaptations in everything, animate and inanimate; I feel myself constantly in His presence, and every moment under the control and discipline of His laws. Revelation may present higher objects than nature to our faculties; but nature does appear to me to address them *all.* By you, perhaps, similar views are entertained; but I go a step further. I do not regard all the Divine adaptations unfolded to us through our Causality and Comparison as intended merely to excite a devout Wonder and Veneration, without leading us to do anything practically. On the contrary, I see practical lessons embodied in every one of God's natural institutions. For example, science enables us to perceive that God has bestowed a certain constitution, and assigned certain functions to the lungs, brain, skin, stomach, and nervous system of man. The *object* or *design* of all these is to enable us to live in health and enjoyment for three score years and ten at the least. But Divine wisdom has appointed *certain conditions* which man's intellect has discovered, and which his Veneration is capable (when once properly directed) of inducing him to observe, *as the terms* on which the boon of life and enjoyment is bestowed. One of these is, that we shall breathe the atmosphere in the form in which God has prepared it and adapted it to our lungs and blood. The combination of oxygen, nitrogen, and carbonic acid gas in the atmosphere is adapted with exquisite wisdom to our animal frame. But in Exeter, Liverpool, and many other towns, men, through ignorance and sloth, have allowed the exhalations of decaying animal and vegetable matter to mingle with God's compounded atmosphere, and, in consequence, they have died *prematurely* in great numbers. The clergy prayed with and comforted the sick, or read the burial service over the dead who had perished by this infraction of the Divine law; but, not viewing nature as I do,—as a direct appeal by God to their Comparison and Causality, their Wonder and Veneration,—they allowed the causes of the sickness to continue in operation for generation after generation, and never thought of addressing the faculties of Causality and Comparison in the suffering people to point out to them the sources of their suffering, or of rousing their sentiments of Veneration to induce them *to fulfil the will of God* by removing these causes.

"When I see the structure and functions of the lungs to be instituted by God, and observe their exquisite adaptation to the atmosphere, my Veneration is strongly roused. When I discover the *object* of their institution, and adaptation to confer life and enjoyment on men, my Benevolence rejoices; and when I discover that this gift is conferred *on conditions*, my Causality and Comparison are strongly stimulated to discover what these are, and having discovered them, my Veneration and Conscientiousness are again called into activity, and I endeavour to fulfil them to the best of my ability. The whole of creation is full of similar instruction.

"I recognise the activity of Veneration, Hope, and Wonder, when addressed to the Divine Being, and excited by His word or His works as constituting Religion. *Theology* I regard as consisting of the *intellectual* ideas which the mind forms concerning the Divine Being, His word and His works. Two men may be equally *religious* who differ very widely in their theologies. In point of fact, speaking generally, few of us differ in our religion; our real differences lie in our theologies. I regard the exposition of the Theology of the Bible to belong to those who have made it their profession. The theology of nature, in other words, the exposition of the things which God has instituted in the natural world, of the relations which He has established among them, and of the effects which all of these produce on human happiness, belongs, in my opinion, to the men of science, not excluding the master of Scriptural theology, whenever he chooses to enter the field of natural theology on the basis of science. You refer to the Greeks, Romans, and Hindoos, as examples of what men can accomplish in civilisation under the guidance of nature; but none of these enjoyed the lights of modern science, and even modern masters in science have not yet become generally acquainted with the conditions of the human mind and body, nor studied the adaptations established between it and other objects in nature. Hence *their* attainments present no criterion of what science, when properly applied, may accomplish.

"The principle for which I am now contending is *new*, and if it shall prove sound, it will introduce a new epoch in religion. Thomas Carlyle, in his 'Letters and Speeches of Cromwell,' observes that in the seventeenth century the English squire believed in God as an actual reality, but that this belief has totally gone out among men. There is a solemn truth under his fantastic phraseology. In that age the English squire and people believed that God continued to administer the affairs of

this world on the same principles as under the miraculous dispensations of the Old and New Testament, and they tried to act out that faith in deeds. They prayed, confessed their sins, held fasts and humiliations, and developed certain forms of theological belief, in order to induce God to give them the victory in battle, to give them social institutions to their minds, and plenty in the land, also to remove pestilence and famine. They erred in supposing that the world is now governed by miraculous dispensations, and they failed in acting out their faith. Science has since dawned on man, and revealed nature ruled by God on totally different principles *in our day.* The things of creation are adapted to each other, and the whole to man by the most exquisite skill of divine wisdom; and the very characteristic feature of the system is that it is so perfectly arranged to suit the purposes for which it was instituted, that it is uniform, and that *man may* rely on its uniformity in action. He may safely study it, shape his conduct by it, and trust to its results in temporal affairs. The *ascertained fact* that the men of the seventeenth century failed in acting out *their* views of the divine administration, and the revelation of a different system of providence by science, have produced that state of mind in the elevated men of the nineteenth century which Carlyle alludes to, when he says that they no longer believe in God as an actual reality. They certainly believe in His existence and His power, but they do not believe in His administering this world's affairs in the way that Cromwell and the men of his age thought that He did.

"In our day the half educated who are religious continue to hold by Cromwell's views, and retard the march of true religion, education, and science. There is an admirable exposition of the effects of their belief in the Archbishop's address "On the use and abuse of the present occasion," pages 10, 11, and 12. I could not desire a more direct authority in support of the views which I am endeavouring to expound than these pages. Allow me to add, that it appears to me that the belief in God as a practical reality will be brought back to the hearts of men effectually, and never again to be shaken, by directing their Comparison and Causality to a clear understanding of His divine institutions and their adaptations in this world as guides to human conduct, and by raising their religious sentiments *to give effect to them.*

"In all this, there is no interference with revelation in relation to a future life. The communication of a life beyond the grave is beyond the power of science; supernatural acts, there-

fore, constitute its proper evidence. These acts are not needed and are no longer performed, after the communication is consummated; and hence the study of this world's administration, in our day, is legitimately left to science or human reason. I give you this as a view presented to me by sincerely religious men.

"I apologise for so long and so imperfect an exposition of my views. I repeat that if they are sound, their introduction into the public mind will give a new turn to theological science in regard to this world, and will, in my opinion, bring forth a natural religion resting on the basis of nature, practical and ever improving as science advances, and Christianity will stand side by side with it, purified and rendered more and more practical, and more congenial to the highest and best cultivated minds. If these views are delusions they will all perish and disappear.

"I alluded to German theology because, 1st, It was the moral and intellectual vigour of the German mind that introduced the Reformation; 2ndly, the organs of Causality, Comparison, and Conscientiousness are larger in the Germans than in the British, and the Germans are therefore more intrepid, sincere, and profound in their investigations of moral and religious truth than the British. They have smaller knowing organs, and are less practical; 3rdly, the state of society and the law allow far freer discussion among them of religious topics than is permitted in our country. On the same principle, therefore, as the Germans were in advance of us in the Reformation, the natural conditions exist among them for their being in advance of us still in their modern theology. On their opinions, however, I lay no stress. My views are based on nature.

"A striking illustration of the principles advanced in this letter presents itself while I write. In the official report of the mortality of Edinburgh and Leith for the year 1846, the following results appear:—

"The mean age, at death, of first class, gentry and professional men, was $43\frac{1}{2}$ years.

"The mean age, at death, of second class, merchants, master tradesmen, clerks, &c., $36\frac{1}{2}$ years.

"The mean age, at death, of third class, artizans, labourers, servants, &c., $27\frac{1}{2}$.

"As I read this document, it is an intimation that these different classes have fulfilled, in widely different degrees, the *conditions* on which God proffers to us the boon of life, and my Benevolence, Veneration, Comparison, and Causality, are

strongly stimulated to inquire into the nature of these conditions, to unfold them, when discovered, to all of these classes as God's institutions, and to appeal to their Benevolence and Veneration to respect them as such, and to enforce their study and practical application of them in order that the divine boon of life may not, by so many of my fellow-citizens, continue to be trampled under foot and forfeited. The present state of religious opinion will allow me to do this as a *matter of worldly prudence;* but it will reject all attempts at calling in the Authority of the religious sentiments to rouse Causality and Comparison in the people to the study of the conditions of life, as God's laws, and to obey them out of deference to Him; and the causes which produce so much premature death must, in consequence, continue to flourish with all their effects unchecked; for the dictates of mere prudence do not suffice to induce the people to remove them."

He found ample proofs of the necessity for training in secular matters in the tables of the mortality of large towns, and in the reports of sanitary commissions; and he ranged the facts which they supplied as a park of artillery against his opponents. He recognised, however, great difficulty in defining secular education, because every truth of science, if contemplated in connection with the idea of the Author of Nature, and His objects in establishing that truth, may excite Veneration, and become a religious as well as an intellectual truth. "In fact," he said, "I do not consider that we shall ever have religion operating fully in human conduct until the minds of the young be trained to connect Veneration with every important practical scientific truth. The real distinction would be into natural and supernatural. But the age is not ready for this distinction, and, in want of a better definition, I would hold secular instruction to include all truths in nature, all reputedly true histories of human events, and all principles of morality and religion necessary for the right ordering of practical conduct in the affairs of this life." He excluded the Catechism as a text-book, because it was no longer a suitable guide to faith, and he had been told that so much was acknowledged in private by the liberal spirits of

the clergy, although they remained silent on account of the apparent impossibility of securing anything like general agreement on the subject. In support of his objection he quoted from an article by Dr Chalmers in the *North British Review* for February 1847, in which the startling announcement was made that the creeds and confessions of the Church had become effete.* This was putting the case in even a stronger light than Combe had ventured to do.

For the purposes of national education, he proposed that a rate should be levied on school districts or parishes, the administration of the fund and of the school to be committed to the ratepayers under proper regulations to be enacted by Parliament. The plan was similar to that which had worked so successfully in Massachusetts under the direction of Horace Mann; in fact Combe, in 1847, advocated all the essential elements of the system adopted in the English and Scotch Education Acts of 1870 and 1872. The Government of 1847 did make some effort to satisfy the demand for legislation on this important subject. The Minutes of Council of August and December 1846 showed the desire to do something, but the scheme stirred the secular educationalists into active discontent, and Combe was writing incessantly against it in the *Scotsman*. It was sectarian in spirit, but the sects quarrelled over it, and Combe said that it should be called "Minutes of Council to encourage sectarian religious teaching, and to perpetuate sectarian distinctions and disputes with increasing bitterness to the latest generation." He wanted the Government to provide for the education of the people, but he wanted the elements of theological wrangling entirely

* "As things stand at present, our creeds and confessions have become effete, and the Bible a dead letter; and that orthodoxy which was at one time the glory, by withering into the inert and lifeless, is now the shame and reproach of all our churches. . . . There must be a deplorable want amongst us of the 'light shining before men,' when, instead of glorifying our cause, they [men like Thomas Carlyle] can speak, and with a truth the most humiliating, of our inert and unproductive orthodoxy."—*North British Review.*

eliminated, and in Manchester the first active steps were taken to secure such a measure as would be acceptable to all classes. In the last letter he wrote to his brother Andrew (14th June 1847) Combe said :—

"We are in great spirits about education. A committee of seven persons, of whom five are Scotchmen (Alexander Ireland is one), have met in Manchester, and drawn up a programme of a system for the county of Lancaster, exactly resembling the Massachusetts system. They have the benefit of the whole experience and machinery of the late 'League' [the Anti-Corn Law League], and have reason to believe that they will find support in the county to carry a bill through Parliament embodying their programme. They have corresponded with me, and I have given them every practical suggestion in my power. I have shown their programme to Lord Dunfermline [formerly Speaker to the House of Commons], and he is delighted with it, and says that if they come forward with a powerful demonstration in favour of it they will give an impetus to the right principle that will be irresistible."

The Manchester programme was drawn up by Mr Samuel Lucas, who took as his guide Combe's exposition of Horace Mann's system in the *Edinburgh Review* for July 1841. Combe gave it energetic support by private correspondence and his writings in the *Scotsman* and other journals. But he saw with dismay that Government was likely to carry the measure which he and even many sectarians had so strenuously opposed, and he felt satisfied that it was only embarking the country on a sea of trouble in regard to education. He would rather have had no measure at all than one which adopted the Catechism as the basis of instruction. To Sir James Clark he wrote on 14th April 1847 :—

"It is a great evil to the nation that our Whig leaders have so little faith in the power of a right principle to vindicate and establish itself. If Lord John Russell could see that the endowment of inconsistent dogmas in schools is *immoral*, and cannot, if a moral God governs the world, prosper; that on the contrary the endowment of sound secular education,

in other words, a knowledge of God's order of creation and providence, is *highly moral*,—he would face all earthly powers in support of the latter, assured that the right will vindicate its own might in the long run; and he would shrink from the former as from a house whose foundations are undermined, whose walls totter, and whose timbers are rotten."

This steady and earnest crusade against sectarianism found its strongest utterance in his pamphlet—"What should Secular Education embrace?" In it his object was to show that while the great aim of all teachers was to impress their pupils with the conviction that God governs the world, none of them attempted to explain *how* he does so; and that until we knew the *how* and practised on the knowledge, our belief that He does govern the world must be barren. "The great aim of secular education," he said, "should be to teach the *how*, namely, by what arrangements and forces God does govern the world, and to produce the conviction in the youthful mind that it cannot escape from the influence of this government, but must obey it and enjoy, or neglect it and suffer." He defined the word "secular" as referring to temporal matters, in contradistinction to "spiritual, which designates things relating chiefly to eternity;" and he repeated the explanation of secular education which he had given in the two previous pamphlets. He did not enter into the details of a scheme, but endeavoured to show the kind of information of which man stood in need in order to act his part in this life with success. It was an amplification of the principles expressed in the letter to Mrs Whately, previously quoted, and he spoke very definitely as to the use to be made of the Bible in schools :—

"In regard to religious instruction, the Bible constitutes the only directory recognised in Protestant countries concerning the mode of securing everlasting happiness. The object of the school for religion, therefore, may be held to be to unfold the means by which eternal interests may be best secured, and to train the young to practise them. Although

the Bible contains, as subservient to this end, numerous valuable precepts for regulating secular conduct, yet, not being intended to supersede the use of observation and reflection, it embodies no complete exposition of the special natural agencies by means of which the order of God's secular providence is *now* executed and maintained. Moreover, it does not expound the arrangements in nature by which even its own precepts in regard to the duties and interests of this life are enforced and rendered practical. Hence, secular instruction, such as is now recommended, is necessary to render practical the moral precepts even of the Bible itself. Every precept of the Bible, therefore, which has a counterpart in nature, and which is supported and enforced by the order of God's natural providence, may legitimately be introduced into secular schools."

The pamphlet was published in January 1848, and Combe regarded it as one of the most important productions of his life. It contained the full development of an idea which had been growing in his mind from the day when, as a child, he had been led to make that experiment with his sugar-candy, which first made him doubt the literal truth of direct reward for good actions. It presented the solution of a problem towards which he had been constantly striving to advance during the past twenty years, and had only now reached to his own satisfaction. "I have the conviction," he wrote, "that, at last, the ways of God are revealed to man, in so far as the government of this world is concerned; or rather, that the true method of discovering the details of these ways is unfolded. Whether or not this is a hallucination of Self-esteem, God knows; but it appears to me to be the real accomplishment of a great work; one which has engaged the highest intellects from the beginning of history to the present day. I feel as if I had now accomplished my mission; and when I look back to the first germ of interest in the question in childhood, and to all the intermediate steps (many of them in my eyes fortuitous), by which I have reached the goal, I cannot help feeling that I have been an instrument, or being, appointed by God for accomplishing this end. I do not mean that He miraculously

inspired me; but that He made a brain and placed it in circumstances which He intended and foresaw would reach the result now accomplished. Time will show whether this be a hallucination or a truth. I am not elated, but happy, morally and intellectually, in my work."

Upwards of a hundred copies of the pamphlet were distributed gratuitously, and the theories it advanced speedily attracted the attention of a large section of the public. The two preceding pamphlets—"National Education" and "Religion and Science"—shared in the interest now aroused, and their author was visited with greater condemnation than ever, if that were possible, by the clerical journals. For their strictures he had been prepared, however; and, indeed, their attack was not so overwhelming as he had anticipated. "I have no expectation of operating on the bigots; but some of encouraging the new generation to advance in the path of independent thinking; also some, in hastening the day when the clergy will be forced to move in their projected modifications of their old creeds." But there were a few sincere friends who doubted the wisdom of the publication of such advanced opinions as his were at that time, and there were those who charged him with sacrificing the public good to motives of personal vanity. "God knows that I have little gratification to this feeling from the course I pursue," he said to Mr Cobden, "for here I am spoken of as a 'pestilent fellow,' and am shunned in society by excellent people whom I esteem and would love if they would allow me. But I have an ample compensation in the esteem of others and in inward satisfaction."

He undoubtedly had a large number of followers and admirers amongst the younger men of the day, and one indication of it was the reception accorded him at the first soirée of the Glasgow Athenæum, 28th December 1847. The soirée,—which was the Scottish equivalent of an English public dinner,—was given to celebrate the success of the institution, and Charles Dickens occupied the chair. The hall was crowded

with men whose ages ranged from twenty to forty years, chiefly of the middle and artisan class. It was estimated that about 3000 were present. When Combe rose to second a resolution in favour of science and art, he was enthusiastically greeted, and for a few instants was unable to utter a word, so loud was the applause. Robert Chambers, who followed him, was hailed with similar enthusiasm. This was wholly unexpected by them and by every one else, and it was regarded as a demonstration in favour of their liberal views. That it was so regarded by the orthodox was evinced by the publication in their journals—particularly in the Edinburgh *Witness*, the organ of the Free Church, edited by Hugh Miller—of articles showing the utter subversion of the old Standards which was involved in the prevalence of the doctrines advocated by Combe.

In passing, Combe's description of Charles Dickens, as he appeared to him at this meeting, may be quoted here :—

"I never had seen Charles Dickens before. He came half-an-hour late, and the audience was impatient; but he was rapturously received. He is rather under the middle size, well made but not muscular. His head also is rather under the average in size; pretty fairly balanced, but the anterior lobe is not one of commanding dimensions, nor are his moral organs above an average in height. His superiority lies in his temperament, which is nervous bilious. He looks intense, but his natural language or expression partakes of the severity of the base of the brain, not sensual, but hard. His head and manifestations gave me the impression of his being a clever but not a great-minded man."

# CHAPTER VII.

1847–1848 CONTINUED—PROPOSED EDUCATIONAL ASSOCIATION—WILLIAM ELLIS—OBSTACLES TO EDUCATIONAL PROGRESS—THE WILLIAMS SECULAR SCHOOL—OBJECTS OF THE TEACHING—TOUR IN GERMANY—THE SPURZHEIM FAMILY—THE DEATH OF ANDREW COMBE—CHARACTER OF THE FRENCH—THE TOMB OF GALL—DR VIMONT—DR VOISIN—PHRENOLOGY AND THE PARIS ACADEMY OF MEDICINE—TERMINATION OF THE "PHRENOLOGICAL JOURNAL"—ROBERT COX—BIOGRAPHY OF DR COMBE—THE COMBES AT HOME—THE SABBATH—THE FRENCH REVOLUTION—THE LABOURING CLASSES—IRELAND AND THE IRISH—JURY TRIALS IN IRELAND—LORD JOHN RUSSELL—LORD CLARENDON—THE CURRENCY QUESTION.

ONE result of the educational pamphlets was that Combe received, on the same day, letters from Lord Dunfermline and Mr H. C. Watson proposing the establishment of an association, which should have for its object the propagation of secular knowledge by means of schools and lectureships. The idea was one which filled Combe with delight, and he immediately consulted his friends Robert Chambers, Charles Maclaren, and Dr Schmitz, who was then Rector of the High School, and, being a man of liberal opinions, making vast improvements in the system pursued there. They were all sanguine that such an association would be the means of conferring great benefits on the country; and they were agreed that Combe should not appear in connexion with it, as his name would frighten the orthodox into opposition. As he had only one purpose in view—that of advancing the education of the people—he was content to be nominally excluded from the action of the proposed society. But when they came to discuss details, the whole project fell to the ground. Mr Watson desired to give a political bias to the association; Mr

Chambers wished to begin with the "organization of labour;" and, on the other hand, Lord Dunfermline, whilst eager for any *social* reform, would not depart from a rule which he had for many years observed, not to involve himself in any movement of a political tendency. Then Combe became aware that the two proposals submitted to him, whilst apparently similar, were, in fact, widely different. He still, however, cherished the idea of carrying into practice his theories of education by means of a great model school, supported by subscriptions, and in which the doctrines of the natural laws should be made the foundation of general instruction. He proposed that a school of this character should be opened under the auspices of the Philosophical Institution, and the Henderson Trustees agreed to grant £25 a year to maintain a class for Phrenology; but they stipulated that Phrenology should be made a prominent subject in the programme. The directors of the Institution declined to accept the grant with this condition, and Combe was again disappointed.

About this time he received from Mr William Ellis, the author of "Outlines of Social Economy," a copy of his little work entitled "Questions and Answers," which was designed to teach children the elementary principles of Economical Science. Mr Ellis in his youth had associated much with Mr Tooke, the author of the "History of High and Low Prices," &c.; with James Mill, and his son John Stuart Mill. In this society he imbibed a strong predilection for Economical Science and for the Social Sciences generally; and the advantages which he derived from the study of the former especially made him desire that the same study should become a fundamental part of education. His first practical effort to realise his object was to teach a class in the British and Foreign School, Camberwell, which was conducted by Mr George Holmes; his next was to give instruction to a dozen schoolmasters on the Saturday afternoons; and when the first

Birkbeck school opened, he for some time conducted in it a class in Economical Science. He was energetic in fostering other schools on the Birkbeck plan, and in the course of years he gave what time he could afford from the duties of a responsible office, and large sums of money towards the advancement of his favourite branch of education. His works, which were amongst the first, if not the first, to teach the elementary principles of economy, continue to be highly esteemed text books. But he was only at the beginning of his practical efforts when he first communicated with Combe. They were then personally unknown to each other, but a correspondence was commenced which led to an acquaintanceship that became an intimate and enduring friendship through mutual interest in the question of practical or secular education. They differed widely on theological questions; but they were in perfect accord on the main questions which affected the daily lives of the people. Combe was much troubled by the difficulty of reconciling the schemes of those friends who were disposed to act with him in founding a secular school, when he first came into contact with Mr Ellis, in whom he soon recognised "one of the soundest, most active, and most practical educationists with whom I have corresponded." He frankly explained his position to him, and the following extract from a letter, dated 20th April 1848, shows how eagerly he was searching for the means to accomplish his benevolent object:—

"Mr Gladstone's letter [to Mr Ellis on education] is an exponent of the state of mind of a large portion of estimable persons in this country, whose errors form the grand bulwark to educational progress. It has greatly puzzled me how to deal with them. I see by your letter that you treat him, and I presume others of his class, as if they were in the right in their own high and holy position, and try to soften their prejudices, and induce them by gentle treatment to consider your principles, under the assurance that there is nothing in them that really conflicts with their own. Most of my friends have pursued the same course, and have strongly advised me to do the like; and to some extent I have complied with their

suggestions, and endeavoured to make my doctrines as palatable to the orthodox as possible. But my own judgment and conscience have never been clear on the subject, and if I have any misgivings in regard to my past life, it is a suspicion that I have yielded too much to the desire not to offend, and not to excite hostility by announcing boldly all the truth that I know. This doubt is increased by the results. The orthodox are as hostile as ever. They will not approach the study of nature in the light in which you and I endeavour to place it—namely, as in itself well-constituted and wisely adapted to the nature of man; and all those who have come to embrace my views have given up orthodoxy; and many have told me that they would sooner have done so had they been encouraged by a clear annunication of opinion from me on the subject. It is under this view that in my later pamphlets I have spoken out more explicitly.

"But this brings me to the practical purpose for which I have introduced this explanation. I rejoice exceedingly in your confidence in being able to find funds for a school in which to teach the natural laws; and it would gild the declining years of my life (for I am now 59½) with the brightest rays of sunshine to assist in establishing and conducting it by every effort of advice and co-operation. One only obstacle presents itself: I should have no coadjutors in this city, and one man is inadequate to the task; and I fear without coadjutors we should have no scholars! You may well wonder that, after twenty-five years of teaching by lectures and the press, I should have such an avowal to make. But the causes are easily explained. The disciples of Dugald Stewart and Dr Thomas Brown were, and are, the leading men of Edinburgh: they are Edinburgh Reviewers, judges, barristers, and physicians; and the Church was, and is, highly Calvinistic. From 1822 to 1836 I waged incessant war against them by lecturing and publishing, and raised up a school of disciples; but in 1838 I went to the United States, and afterwards to Germany and Italy. The converts made are scattered over Scotland and England, and retain their faith; but as there has been no teaching in Edinburgh for ten years, there is no new generation of instructed men. The orthodox and metaphysicians rule the city with undisputed sway, and I have more influence in Glasgow or Manchester than here.

"I have, however, been thinking of trying the pulse of the new generation (many of whom I am told are liberal in their tendencies) by delivering a few public lectures or addresses on the subject of secular education, and endeavouring to judge

whether any working spirits could be found among them. The only difficulty in the way of realising this design is the uncertainty of finding an audience. Were I to commence lectures and no audience appear, the cause would be damaged more than ever. I shall try by inquiry to ascertain the nature of the ground. The object of my addresses would be to make my audience acquainted with the natural laws as the basis of all sound secular education, with your books as practical exponents of them, and to try their pulse on founding a school."

Without adopting this precautionary measure, he was induced by his own eagerness, and encouraged by the advice and promises of assistance he received from Mr Ellis, to attempt to found a school for the education of the children of the working classes. As he could not bring his Edinburgh friends to any practical issue, he determined to act alone; but with his customary cautiousness, he proposed to begin in a very modest way. In the preliminary arrangements he was actively assisted by Mr Robert Cox, who continued to be his right hand in all his philanthropical schemes; and he was soon joined by his old coadjutor in the Phrenological Society, Mr James Simpson, who appeared with him as one of the promoters of the new school. There were free schools conducted on the orthodox lines with which they would have to compete; and the competition would be difficult to overcome, for they proposed to charge fees: first, because by doing so they would give the school a prospect of permanent success on its own account; and, second, because the fees would tend to make parents appreciate the education offered to their children. It was necessary to make the fees low, and the sum fixed upon was 4s. per quarter. A small hall in Infirmary Street, situated in the midst of the workmen's dwellings, was hired at a rental of £10 a year. The situation of the hall and the rental presented the two first requirements of the experiment. They next required to find a teacher who should sympathise with the objects in view, be ready to carry out the plans of the promoters, and be content to work hard for a moderate salary.

In this respect they were peculiarly fortunate, for through Mr Ellis they found Mr W. Mattieu Williams, who had acted as honorary secretary to the school of the London Mechanics' Institution, and was at the time undergoing a course of practical training in tuition in that school. Besides, Mr Williams was a phrenologist, and an active member of the Phrenological Society in connection with the Mechanics' Institution. He had studied the works of George and Andrew Combe, and although a young man, he had advanced and clear views in regard to the education of the people. Above all, he was enthusiastic in his desire to be useful and to do good work; and he accepted the very moderate terms offered to him because he had no doubt of the success of the project. He brought to the venture the energy of youth and talent, and Combe was not only satisfied but amazed at the good fortune which had provided him with the man who, by training and sympathy, was the one best qualified to carry out his views. Mr Williams left London in time to help in furnishing the school-room, and in finally arranging the details of operation. The next thing to be done was to give the school a distinctive title; and after some deliberation it was decided to call it the Williams Secular School.

The necessary funds were provided by subscriptions from Mr Ellis and other friends, and the Henderson Trustees agreed to grant £50 a year on condition that Phrenology should be taught. The total subscriptions for the first year amounted to £227, 16s. 8d., and to this was added £56, 14s. 8d. as fees at 4s. per quarter for each pupil. The arrangements so far advanced, a meeting was held in the Freemasons' Hall on the 27th November 1848. Over 400 of the working classes attended; they were addressed by Combe and Mr Simpson; and the school was opened on the 4th December with 25 pupils. Besides the ordinary branches of education, the pupils were to be instructed in all those laws of nature a practical knowledge of which would tend to render the labour-

ing classes intelligent, thoughtful, provident, healthy, and, in consequence, happy and good citizens. In Political Economy they were to learn how the prices of food and the rates of wages were regulated; in Phrenology and Physiology they were to learn the laws which affected the health of mind and body. And, as Combe stated in the first draft of the prospectus—

"One great object of the teaching of the school will be to convey to the minds of the young a perception of their actually living under a scheme of divine government which favours temperance, industry, intelligence, morality, and religion in this world; and to train them to refer in their judgments of men and things, and in their own actions, to the laws by which this government is maintained and enforced. The practical precepts of Christianity which are recognised by all sects will be taught, but all doctrines on which religious men differ will be left to be inculcated by the parents and pastors of the pupils according to their individual convictions."

On these principles Mr Williams proceeded energetically to work; and for some time Combe taught the rudiments of Physiology and Phrenology to the elder pupils for one hour every Monday and Thursday. He was accustomed to say, "I am so far from being led astray by sanguine expectations that every serious enterprise of my life has in its results exceeded my expectations," and he made the remark with good reason in regard to the Williams School. The first examinations showed that the scholars were making real progress in practical information; their number steadily increased to 60; and in September 1849, when the school was removed to 1 Surgeon Square and opened for girls as well as boys, the number was 160. About one-third of the scholars in the new premises were girls, who were placed under the care of a competent female teacher. For five years the experiment was carried on satisfactorily; but at the end of that period Mr Williams accepted the head-mastership of the Birmingham and Midland Institute; the attempts to find a qualified suc-

cessor proved futile, and soon after his departure the school was closed. A similar school in Glasgow, promoted by Mr James M'Clelland, was successfully conducted for many years. Although Combe's efforts did not result in founding a permanent establishment, they rendered valuable service to the cause of education, in showing that the laws of nature and social science formed the soundest basis of knowledge, and that their elementary principles could be acquired by the young. The system adopted in the school was observed by the directors of other establishments; and whilst the word "secular" frightened many worthy people, they learned something from the work that was going forward. Dr Schmitz attempted in the face of much opposition to introduce a natural philosophy class into the High School, but he could not obtain permission to give more than one hour a week to it, and, as attendance was optional, the class failed. In other schools, and under different names, parts of the secular system were adopted. In like manner, the principles advocated in the "Constitution of Man" and the "Moral Philosophy" had many followers, whilst the sources from which they had been obtained were either forgotten or unacknowledged on account of their ill-repute among the orthodox. "Your works are operating upon the minds of many who would not like to own the source from whence they drew their knowledge," Cobden wrote to Combe in the heat of the educational struggle. "You are in the position of a prophet whose disciples disown their master! But you must console yourself with the reflection that your doctrines are so true that men are constrained to believe and propagate them against their will." There was one Churchman who saw nothing to dread in Phrenology—that was the late Dean Ramsay, who in January 1847 brought the Duchess of Buccleuch, with her four sons, to have their developments taken by George and Andrew Combe. The Dean made careful notes of the advice given by the Combes regarding the education and physical treatment of the boys. Another

lady—a Marchioness—desired to have the heads of her sons examined, but Combe declined; he had an objection to make these examinations except for friends whom he knew to be actuated by serious motives.

In the experiment with the Williams School, Combe had been deprived of the guiding influence of his brother; for the calamity which had so often appeared to be close at hand came in the end suddenly, and, in a manner, unexpectedly. On the 16th April 1847, Dr Combe, accompanied by Miss Cox, sailed in the "Montezuma" from Liverpool for New York. His health had been comparatively good throughout the winter, and this voyage was undertaken in the hope of strengthening his constitution. The "Montezuma" carried nine cabin passengers and 360 emigrants, who were crowded into ill-ventilated berths, which extended beneath the cabins. Dr Combe was obliged to remain a good deal in his cabin on account of the weather, and the effluvia which ascended from the steerage, together with the confinement, exercised a most detrimental effect on his health. It is believed that this, in all probability, hastened his death. The experience which he gained on board the "Montezuma," of the conditions under which emigrants were carried, supplied him with the material for the last effort he was able to make on behalf of humanity in his letter on Ship Fever, which was published in the *Times* and in the *Journal of Public Health* soon after his decease. He was received at New York on the 14th May by his brother William; and he intended to remain in America for a couple of months. But the state of his health compelled him to alter his plans, and on the 8th June he began the homeward passage. He arrived at Liverpool on the 25th June, and proceeded to Edinburgh. On the same day, George Combe, unaware of his brother's return, started with Mrs Combe for the Continent.

The Combes travelled leisurely through Belgium, giving a few days to the picture galleries of Antwerp and Ghent, and

passing into Germany. At Coblenz, on the 16th July, Combe received a letter from his brother intimating his arrival, and the death of their eldest sister, Mrs Young, on the 4th of the month, in her seventieth year. This latter event reminded Combe of his father's frequent remark, "that the Combe family all died before 72; that although they might reach 70 or 71 in perfect health and preservation, they disappeared before reaching 72. Our father fulfilled his own prophecy." Regarding Mrs Young, he recorded that "she was a rigid Calvinist until the new philosophy reached her, when she became and died a Unitarian." Referring to her peaceful end, and the happy years she had enjoyed after a period of some sorrow, he said, "I regard her exit in this manner as a happy crowning of her life, and shall be glad if, when my day comes, I may be as fortunate."

He continued his journey to the Moselle, and at Trèves he made inquiries for the family of Spurzheim. But the name was unknown, although several members of the family had died in the parish, and Spurzheim had been born about sixteen miles farther down the river, at Longuich, near Schweig. At length the Burgomaster obtained a few bare details for him. Previous to the French Revolution, the Spurzheims had been farmers. On the death of Spurzheim's father, his mother removed to Selters, near Limburg, in the Grand Duchy of Hessen, where she resided with her brother, a clergyman. There were four sons—Francis, who died at Trèves; Caspar, the doctor; John Joseph, who was believed to have died at Vienna; and another whose name was forgotten, but he had been a saddler at Vienna. There was a daughter, Theresia, who had been married at Schweig, and left a numerous family. That was all the information Combe could obtain about the family of one who in his eyes had been amongst the noblest benefactors of humanity.

At Baden-Baden the Combes met their friend, Mr T. C. Grattan, the author of "Highways and Byeways," &c., with

whom they had first become acquainted in 1839 at Boston, where he was British Consul, and he introduced them to Mrs Trollope. Combe was delighted to find Mrs Trollope, in speaking of all persons and nations, gentle, moderate, and just in her remarks, betraying only rational conviction, and neither prejudice nor malice. All this was different from what he had anticipated in the "eulogist of Metternich and the champion of toryism."

The Combes, after visiting Worms, Kreuznach, Goarshausen and other places, arrived at Königswinter on the 17th August. Here letters awaited them with the intelligence that Dr Combe had become suddenly ill on the 2d inst., and was sinking fast. The news was so alarming that they determined to start for Edinburgh by the directest route. Combe passed a restless night, full of distressing thoughts when he was waking and of distracting dreams when he slept. On the following day his worst fears were confirmed, by a paragraph quoted from the *Times* in the *Köhlnischer Beobachter*, intimating the death of Dr Andrew Combe, at Gorgie Mill, at midnight on the 9th August, and referring to his last literary effort on the subject of Ship Fever. A fortnight previously, Combe had made an appointment to receive two gentlemen from a distance who desired his counsel in a matter of much delicacy, and of great anxiety to one of his friends. The gentlemen came ; he made an effort to give all his attention to the business in hand; but his thoughts and feelings were deeply engaged in other scenes, and two days elapsed before he was able to inform his friend of the result of the interview. In his journal he wrote on the 18th August,—

"I have long contemplated losing my dear brother in some such sudden manner as this, and thought that I was prepared for the event, but I did not know myself. I have been sad and bewildered in thought and feeling beyond what I imagined possible; and dear Cecy has become nervous, and is

afraid of a return of her complaint of depression. Yet this is nature taking her course. Affection of a life's endurance cannot be suddenly robbed of its object without feeling the loss; but the loss comes by God's appointment. My dear brother has fulfilled his mission; I must soon follow him, and while I live I have only one rule to follow,—do as he has done, devote every energy while it lasts to the service of God and man; enjoy all that a kind Creator places within my reach; resign myself to His will as enacted in His law, and, whether living or dying, utter from the heart 'Blessed be the name of God.' May God help me so to act. My dear brother, could he read this, would say, 'Amen.'"

After the first shock of grief, he acted as he knew his brother would have wished him to act, and as he himself believed to be right. He turned calmly to the affairs of the world, and proceeded methodically with his correspondence and general arrangements, taking care that no living person should suffer on account of his sorrow for the dead. He knew that his loss was irreparable, and he felt it keenly as the years passed on, when some benevolent thought or hope occurred, or when some good deed was to be done; and he missed the sympathy which had intensified his pleasures and helped him to bear disappointment quietly. This influence Dr Combe had exercised over a wide circle of friends; to his patients, his presence alone seemed to bring health, and he had been so earnest in his attention to each case that it might have been the only one claiming his care. He was remembered as a man of gentle life, of calm judgment, and wise, far-seeing eyes; one eager to detect the good in human nature, slow to see the bad, except when seeing might help to bring about amendment. Then, he would lay bare ugly spots in conduct with the precision of a skilful dissector, but with such a tender hand that the pricking of the scalpel was felt to be beneficent and healing. He had lived a useful, noble life, and the memory of his struggle against disease is an invalu-

able legacy to mankind, which has cheered and strengthened many who knew nothing personally of their benefactor.

At Antwerp, Combe found a letter from Miss Cox * containing an account of the last days of his brother, and learned that he had passed away without suffering, in a resigned and even happy frame of mind. The funeral was over; Miss Cox intimated her wish that the Combes should not alter their plans on her account, as she proposed to go to the country in order to recruit her strength for the winter. Nearly all their intimate friends were absent from Edinburgh, and fearing that to go home to brood in solitude upon their loss would injuriously affect his wife, Combe decided to go on to Paris, as he had arranged before receiving the tidings of his brother's illness. They accordingly proceeded by Brussels and Mons to the French capital, which Combe had not visited for thirty years. He noted many and great improvements in the city, and some changes for the better in the habits of the people. Everywhere he saw an increase of mental activity.

"The people are remarkably lively, and where well organised, are very excellent, lovable, good people. Many of them *are* favourably organised; but the great majority have small heads of the Celtic type, moderate in the reflecting and coronal regions, and large in Self-esteem and Love of Approbation, with a relatively predominant development of the organs of the propensities. In this head the organs of the propensities are by no means so large as to give a brutal character to it. On the contrary, the head is long and narrow, and it is the general mass of selfish feelings, in relation to the moral and disinterested, which is the grand characteristic of the combination. There is a want of an all-pervading serious moral interest, and of comprehensive and deep reflection in the head. The temperament is fine and enduring, dark nervous-bilious; the brain is extremely active, and its quality appears to be fine. So far as the size will allow, therefore, its manifestations are numerous and fine in quality. The countenance of a Frenchman possessing this combination, when he is in health and not roused by passion, is intelligent and pleasing. It is not beaming with softness or goodness, or im-

* See *Life of Andrew Combe*, page 521.

pressive from depth of thought, but it is expressive of his being at peace with himself and with the world, and of his having a pleasing internal consciousness. The manifestations correspond. Nothing can exceed the quickness of perception, the tact, and the general soundness of instantaneous and superficial judgment which a Frenchman exhibits; but his best qualities lie on the surface. You do not enter into depths of affection, of knowledge, or of reflection, on becoming more intimately acquainted with him, because these qualities are not in him. Their schemes and conduct are not complete and harmonious. In the post office, in their railways, and in everything else, there are minute regulations, generally very good, but they do not make a consistent whole of good management. There is a want between the parts, something omitted either by the framer of the instructions or the executor of them, which mars the attainment of the object in the best manner.

"The effect of this combination also is that the Celtic Frenchman exists for himself; France is the extension of himself, and hence egotism and patriotism are his polar stars. Neither by moral sympathy nor by deep reflection does he study, comprehend, and become identified with the progress of the race, of other nations, or even of other provinces of his own country, than that with which he is connected as an individual. This race, from its small head, its large knowing organs, and its great ambition, is very much adapted to be led by its own members of the mixed race who have large brains, and who choose to address themselves to its weaknesses. But its cerebral deficiences will present great obstacles to its passing beyond a certain, and that rather a low point in general cultivation and attainment."

The study of the pictures in the Louvre and the Luxembourg was Combe's principal occupation during this month in Paris—for he kept the subject of Phrenology applied to painting and sculpture steadily in view—but he was also observant of the conditions of the country. He could have no suspicion of the storm which was so soon to burst, but he detected the movement of some of the elements which produced it.

"The grand deficiency in France at present is the want of principle," he said. "The religious and the political creeds of past ages are extinct, and nothing true, and, therefore, nothing useful, has taken their place. Every clever man writes, speaks,

and acts according to the perceptions and feelings springing from his individual organisation, modified by his individual circumstances. He recognises no principle or law of morals or politics of higher authority than the views and sentiments of his individual mind. He is approved of by all men constituted like himself, while those of a higher organization and better instruction oppose and decry his doctrines. They however, rest on the basis of their individual perceptions, modified by influences which have affected them as individuals, and their readers become their admirers and partisans from individual sympathy of kindred minds ; and thus doctrine after doctrine, and policy after policy flourishes, becomes obsolete, disappears, and is replaced by another destined to run the same course."

In Pére la Chaise, Combe found the grave of Gall, situated behind the monument of Casimir Perier. On a freestone pedestal stood a marble bust of the founder of Phrenology—"a speaking likeness, and a good work of art." On the front of the pedestal was the single word "Gall," and on the back and sides, sections of a phrenological bust, with the organs numbered, and the names indicated by the numbers were given below. At Passy Combe spent a day with Dr Vimont, and noted that "the plates of his great work on 'Human and Comparative Phrenology' cost £3000, or 75,000 francs. He gave lessons in Phrenology to the late Duke of Orleans, heir-apparent to the throne of France ; and if he had lived, Dr Vimont would have been appointed professor of Phrenology in the *École de Médecine* of Paris." He presented to his visitor a lock of Gall's hair, which Combe greatly prized. At the house of Dr Fossati a number of the French phrenologists gathered to meet Combe, and amongst them was Dr Voisin, whom he visited a few days afterwards at his school for the education of Idiots at Bicêtre, where he saw much that impressed and delighted him in the treatment of the patients. He subsequently went to dine with Dr Voisin at his private Lunatic Asylum at Vanvres. This was an establishment consisting of some large buildings in which the patients occupied one or more apartments according to their means, and of a

number of ornamental cottages, in which a patient could live as in his own house, be served by his own attendants, have his own kitchen, and live in every respect as if at home.

"Dr Voisin early and thoroughly adopted Phrenology, and his whole soul is imbued with it. He defends it, and brings it forward as science before the Academy of Medicine, and sustains ridicule and opposition unmoved. He mentioned a number of incidents to indicate the kind of obstacles that are or were thrown in his way. Because he taught the Idiots, as a means of exercising their organs of form and their senses of touch and sight, to handle models of circles, triangles, parallelograms, etc., he was asked if he meant to propose his Idiots as members of the Academy! On another occasion he was threatened with the loss of his appointment as physician to Bicêtre, and the ruin of his wife and family, and of his partner Fabret as the inevitable result of his persevering in Phrenology; but he had only one answer—'Phrenology is true, and I cannot give it up!' He persevered, and none of the threatened consequences ensued. He showed me the manuscript of a translation of my work on 'Moral Philosophy' which he had made. He read to us an extract from two discourses of his to the Academy in favour of Phrenology. They were excellent, and very eloquent. One sentence struck me strongly. Addressing them as physiologists, he said that when they cease to treat diseases of the brain, they consider themselves as going out of their sphere as physicians, and have no idea that propensity, sentiment, and intellect are functions of that organ, and that immoral conduct and all abnormal manifestations of the mental faculties are within the sphere of physiology; and of course they belong to their department of science. He said that so ignorant were the first men of the Academy of the real importance of the functions of the brain, that they treated such ideas, when seriously addressed to them, with ridicule."

Combe found in Paris a considerable number of phrenologists among the members of the medical profession, and they all treated him with marked respect. He was most gratified by what he saw of the labours of Dr Voisin; for he deemed the testimony they afforded to the value of Phrenology in guiding the treatment of mental disease as so palpable that it must soon obtain general acknowledgment.

The Combes left Paris on the 26th September, and took the steamer from Antwerp to Hull; thence they were now able to travel all the way by rail to Edinburgh, an accommodation which was still so new as to be worthy of record in his journal. They reached home on the 1st October, after an absence of three months, and although they were surrounded by friends, there was the one vacant place in the circle which made this home-coming the saddest they had known. One immediate result of the death of Dr Combe was the termination of the *Phrenological Journal*, which was brought to a close with the number for October 1847, on the completion of the 20th volume. Combe was unable to contribute regularly to the *Journal*, for the advance of years and uncertain health compelled him to limit the tasks he imposed on himself, and he was at present much engaged in the cause of education. Robert Cox had found the duties of his post as editor making heavier demands on his time than could be always met without inconvenience; and there were some parts of the work which he would not undertake to perform now that he was deprived of the Doctor's guidance and advice. He wrote a careful memoir of his uncle—in which he was aided by suggestions from Miss Cox and Combe—for this last number; and with a few hopeful words as to the past and future of Phrenology he closed the work. Mr Cox did not again place himself under the frequently irksome yoke of periodical literature; having a comfortable independence, he was enabled to devote himself to those studies which specially interested him; and on two occasions he took an active part in matters affecting the public. The first was in the contest with the Duke of Atholl, which ended in securing the public right of way through Glen Tilt; the second was in the agitation to induce the Scottish Railway Companies to carry passengers in the Sunday mail trains. In connexion with the latter movement he wrote a pamphlet entitled "A Plea for Sunday Trains," which formed the basis of his work on "Sab-

bath Laws and Sabbath Duties: Considered in relation to their Natural and Scriptural grounds, and to the Principles of Religious Liberty" (1853). The material he had amassed for this book by his researches in British and Continental libraries was so extensive that, to complete his subject, he produced in 1865 his "Literature of the Sabbath Question," in two volumes, containing an exhaustive analysis of all that has been written on it. He also wrote a number of smaller works on kindred subjects; he contributed amongst other articles to *Chambers' Encyclopædia* the one on the "Sabbath;" he prepared the index to the seventh edition of the *Encyclopædia Britannica*—a stupendous task admirably executed; and his last literary occupation was that of editing, in conjunction with his brothers, Sir James Coxe, M.D., and Dr Abram Cox, new editions of the works of his uncles, Andrew and George Combe. To the latter Mr Cox continued to be an active coadjutor in all his educational and philanthropic projects; and took charge of his manuscripts and letters when Combe died.*

It was thought that a biography of Andrew Combe would be of service to the public, and after much deliberation it was decided that Combe should undertake the task. There had been some hesitation as to the propriety of his doing so, lest his fraternal affection should lead him to say too much, or, in the effort to curb his admiration, too little. But this objection was put aside, and he began the work early in 1848. Dr Combe had left all his papers to the care of his faithful companion, Miss Cox; and as there were many which he desired no one save her to see—she having the most intimate knowledge of his wishes regarding them—he had desired her to read them all, and to destroy those which she should consider were not intended for the inspection of others. To this duty Miss Cox applied herself; and the deep affection and reverence

* Mr. Robert Cox was born at Gorgie Mill, 25th February 1810, and died suddenly in Edinburgh on 5th February 1872.

with which she regarded the memory of her uncle, rendered her most anxious to fulfil his wishes with scrupulous fidelity; and equally anxious that the biography to be written should be worthy of him.

Combe was now living very much retired. Two or three hours of the mornings were occupied in composition, revising his works, or preparing the materials for his brother's memoir; the afternoons were given to exercise, chiefly driving; in the evenings Mrs Combe read to him the poems of his friend, Dr Charles Mackay, or other works of imagination, which he said always afforded him most pleasure when they were aided by her elocution. At times a few intimate friends—Mr Charles Maclaren, Dr John Brown, Mr Robert Chambers, and Miss Stirling Graham always prominent amongst them—would join them at dinner; and the topics of the day—education, the state of Ireland, the currency, and free trade would form the leading themes of conversation. Big "company" dinners he disliked, and he observed with regret a growing disposition on the part of his countrymen to "eke out the deficiency of higher qualities by heavy displays of wealth—which by many of us is not possessed—and this in the form of overloaded feasts and extravagant displays of expensive wines. Neither our tastes nor our fortunes prompt us to indulge in such vanities." The Sundays were passed in a sufficiently orthodox fashion, except in one respect—they were accustomed to drive in the afternoon! Mr Maclaren with his wife ventured upon a similar feat.

"You remark that Mrs Maclaren saw Mrs Combe and me taking a drive on a Sunday," Combe wrote to Mr Samuel Lucas, who had complimented him on his moral courage. "I was surprised and pleased to see her and her husband similarly employed, and admired *their* moral courage. Mrs C. and I are now established heretics; for we have taken a drive every Sunday afternoon for fifteen years, and the neighbours are accustomed to our profanity and do not trouble us; but we are *the only* individuals apparently who venture on such a

desecration, as they call it, of the Lord's day, for we very rarely meet a carriage on the road."

The degree of courage required to take a drive in Scotland on the Sabbath thirty years ago will scarcely be understood even by Scotchmen who have been born on this side of that period, although the manner in which the day was and is observed is still a standing joke against the country. Walking, except to and from church, was forbidden; a smile was the sign of ungodly thoughts, a laugh was rampant wickedness; and much the same gloomy routine of tasks described by Combe in his autobiography was considered the holy order of the day. But there was more hypocrisy than formerly in this routine, because there were so many more minds imbued with liberal ideas, and adopting the traditional observance for fear of their neighbours, and not because they believed it to be sensible and right. Scotland, the most liberal nation in politics, is the most conservative in religious conventionalities. Combe had from an early period taken a firm stand against the restrictions which rendered the day of rest one of weariness to the flesh, and he was still doing what he could to bring about a more rational respect for the Sabbath. One incident occurred about this time which he hoped would help forward a reformation in regard to travelling at any rate.

"The evangelicals have closed most of the Scottish railroads against Sunday travelling; but last Sunday an incident occurred which will tell against them. The Duchess of Sutherland in summer lives far north in Scotland. She received notice that her father, the Earl of Carlisle, was dying in England. She travelled post haste to Perth, where she arrived on Sunday morning, just as an engine and one car were about to start for the south with the mail bags, which the Government compels the railway directors to transmit. The Duchess entreated for a place in the car, or to be allowed to have one attached, and stated the occasion of her journey. Her entreaties were in vain. She was forced to take to the road with horses, and her father was dead before she arrived at his house. This might have happened to you or to me, and nothing been said about it; but happening to a Duchess

is another affair, and there is a great to do making about it; and the orthodox are alarmed at the effect which it will produce on the public mind."

In January 1848, Combe, writing to Cobden, described the two races existing in France, and pointed out to him the danger which England lay under of suffering at any time from the mad excitement of the Celtic portion of that nation. In February came the events which drove Louis Philippe from the throne, and Combe wrote to Sir James Clark on the 29th—

"I am not apt to despond in regard to the destinies of men; but at present I cannot see into the future. Germany and England are the only spots in Europe in which there is a substratum of well-developed brain, moralized and cultivated to intelligence (imperfect as their culture is) sufficient to give law, order, and civilization a chance against the firebrands of French Republicanism. If the German sovereigns would come properly and honestly forward, and give their subjects the institutions which they are quite prepared for, France would in vain assail against them; and our Parliamentary reform, repeal of the corn laws, emancipation of the Catholics, &c., are so many towers of strength to sustain *our* institutions. But France contains an enormous preponderance of the ill-organised Celtic race, very ignorant, and extremely excitable. They may be led to any mischief by big-headed unprincipled leaders, of which the north-east of France affords a plentiful supply. The Celtic population are so deficient in size of brain, and in the reflecting and moral regions, that reason, their own interest, the connection of cause and effect, and every other motive that sways rational men, fall dead upon them, when their vanity and lower passions are excited. Italy is full of a population not so low in organisation, but as ignorant and as excitable; and Spain is powerless. Austria is irrationally bigotted to despotism, her subjects are ignorant, and her empire discordant. In every quarter, therefore, except the educated portions of Germany and England, are the elements of combustion. I hope that we shall limit ourselves to defence, if war be forced on us. The Austrians have extinguished Cracow. The German sovereigns solemnly pledged themselves to give free institutions to their subjects at the time of the Treaty of Vienna, and they have either failed to do so altogether, or ruled in opposition to the constitutions which they did give. They are, therefore, weaker in moral and physical

power to resist the French, than if they had in good season, and in fair honesty, fulfilled their engagements. These are all infractions of the Treaty of Vienna, or of its promised results; and if these powers trample it under foot to please themselves, why should we be compelled to sacrifice ourselves to support them? Under its conditions they had duties to fulfil, and having neglected these, thay cannot call on us to defend them.

"I am at this moment sadly feeling the loss of my dear departed brother. It would have been a great relief to my mind to be able to discuss all that is occurring and all that may be anticipated with him. There is none left who *knows* so thoroughly the organisation and moral condition of these nations as he did, and who could take such sound and far-reaching views of the future. I have perfect confidence in the forward march of civilisation, and doubt not that these events will hasten its progress, but the intermediate evils may be great. What a lesson do these events read to rulers to educate their people, and not to rely on humbug and make-believe in religion for their safety! In Paris we were told that Louis Philippe did not disguise that he supported the priests merely as necessary humbugs! If the people were taught that God really governs the world, and were instructed *how* he does so, these enormities could scarcely occur."

But notwithstanding his faith in the forward march of civilisation, he was compelled to own that the "massacre in Paris from the 23d to the 27th June is a sad example of Republican 'Fraternity,' and a great discouragement to us reformers." It was a terrible proof of the necessity to educate the masses in a knowledge of the laws which regulate the affairs of this world. He pointed out that in their present ignorance they were liable to be led to destruction by any demagogue who chose to dazzle the eyes and excite the brains of the poor with promises of the spoils of the rich. "The poverty and ignorance of our labouring people," he said, "are our terrible evils, and Ireland is our everlasting blister; but these will not upset our institutions." Even in the midst of the bewildering events of 1848—the revolutions abroad and the riots at home—he felt sure that "the good will come." But he saw only the one means of hastening its approach, namely, by teaching the people that every "right" had its attendant responsibility.

"I sometimes wish that the hand of Time could be put back twenty years with me, and then I could go forth to preach the true salvation with more knowledge and greater experience, and to a better prepared audience than I ever had when I was in the field." One panacea for existing evils, which was favoured by many liberal thinkers, was "an organisation of labour '—an arrangement by which the operatives were to share in the profits produced by the joint action of labour and capital. This was a revival of Owenism, and Combe did not believe it to be practicable on any great scale until the operatives by means of education and moral training were brought generally into the mental condition which is indispensable to the management of labour and capital to advantage. To Mr Ellis he wrote, 10th April 1848 :—

"It appears to me that all attempts, such as are now making in Paris, and such as are proposed here, to organise labour in the form of Socialism, Fourierism, Owenism, or any other 'ism' which shall aim at communicating to brute labour—by which I mean the labour of the muscles—the reward which Providence has alloted only to intelligent labour, or labour enlightened, directed, and controlled by a cultivated intellect and trained moral sentiments—labour, in short, which shall be capable of exerting its powers in accordance with the order of God's natural laws—will end in disappointment. An able, enlightened, and very good and active man at the head of a company for manufacturing for the joint benefit of capitalist and workman (if by his sagacity he select good and active workmen) may make that institution succeed; and this proposition may be repeated as extensively as such a combination can be repeated. It is to such instances that the friends of organised labour refer in support of their views. But to me there seems a fallacy in their inference. These combinations are exceptions to the general rule. Before labour in general can reach a higher reward than it now receives, workmen in general must come more nearly into the mental condition of those in the middle ranks who combine capital and labour. They will never *generally* raise their condition while the *mind* which is to combine their efforts is furnished by a philanthropic manager superior to themselves. In short, in my view, the rate of average wages which any class of workmen receives is

the fair value of their labour and of their mental attainments combined, according to the laws by which God regulates the creation of wealth. The great and common error of most persons who reason on the condition of the labouring classes is the omission of the elements of intelligence and moral restraint as indispensable to the production and accumulation of wealth; and without its accumulation in *their own hands*, the labouring classes never can improve their condition, or attain a reasonable independence."

In May, June, and July he contributed to the *Scotsman* a series of articles on the revolutions in France, Germany, and Italy, and on the position of Britain with reference to the passing state of affairs. In regard to the panic about the invasion of the French he did not advocate the increase of the army, but he desired the government to have munitions of war ready so that the people could be promptly armed. He also made a suggestion, which has been frequently repeated since, that there should be national schools established, at which all the boys should be taught military exercises as an excellent and healthful recreation, as well as the means of enabling government to organise the physical power of the country at a moment's notice. He did not fear that the people would make a wrong use of this training; for he believed that there was sufficient power in the hands of the government to maintain order. The revolution which he anticipated in England was one which would be wrought out by intellect and through constitutional forms.

"Our people do not want socialism or communism," he said, "but they desire the abrogation of entails; a modification of the laws of primogeniture; the abolition of the Game Laws (lectures on this subject are being delivered here to crowded audiences every Wednesday); a thorough revisal of our laws of taxation; the abrogation of religious disabilities; a law for a thorough education of the masses; and eventually an extension of the suffrage."

In August the Combes again visited Ireland, although the *habeas corpus* Act was suspended, and government was offering

£500 for the capture of Smith O'Brien, and £300 for each of his confederates. Combe saw much misery in the country, but no symptoms of rebellion. He was again the guest of Mr and Mrs Hutton, Elm Park, and of Mr and Mrs R. Carmichael. He was brought into contact with men of all classes and persuasions, and had excellent opportunities of discovering the state of opinion on all the subjects affecting the country. The famine, the danger of its recurrence, the poor law, the progress of the National Schools, Home Rule, and the countless wrongs which the country had suffered at the hands of England, were the topics of conversation wherever he went. There was a movement in progress to appeal for the meeting of Parliament during three months of the year in Dublin. Combe pointed out how impracticable this proposal was, and how inopportune the time for making it. But the Irish peers and gentlemen listened to him with impatience. He suggested a better plan than the removal of the whole Parliament to Dublin.

"15*th Aug.*—*Rain and high wind from S.E. all day.*—The accounts of the potato rot become worse and worse. This day I wrote to Lord Dunfermline and Mr Cobden about the new Irish scheme, and I have suggested to them and Mr Carmichael, a division of the House of Commons into three parts, embracing in each English, Irish, and Scotch members; that one section should sit two or three months annually in Dublin, one in Edinburgh, and one in London, to pass bills affecting exclusively these respective countries; that they should meet at 10 A.M. and sit till 6 P.M. if necessary, but not in the evening; that the whole sections should meet as one house in London for three months, and discuss all questions and pass all laws affecting the United Kingdom generally, as taxes, expense of fleets and armies, colonies, foreign relations, &c.; and that the House of Peers should sit in London during the whole time, and receive Bills from all the sections, and pass, reject, or modify them, as they now do. This would secure harmony in their legislation. The diminution of members would render them all more efficient; meeting in the morning would give a character of business to the House; and their localisation in the countries for which they were to legislate would render them more earnest and alive to the interests of

the people, and subject them more to the influence of public opinion. It would tend also, by bringing them more directly into contact with men of the middle classes, to break that exclusive aristocratic spirit which prevails in Parliament, and produces a remarkable want of sympathy between the House of Commons and the Nation."

In all that he saw and heard, Combe was unable to discover any practical solution of the problems which the country presented, socially and politically; and the confusion and distress were so great that he exclaimed "My soul bleeds for Ireland."

"What remedies can be applied to Ireland's evils? The Irish are highly emotional, acute in direct perception, but they are deficient in Causality, and their intellects have not been trained to reason. The relation of cause and effect exists in nature, and their destinies are ruled by it, but it is not perceived and not considered by them. In consequence, they suffer under remediable evils. The middle and upper classes, too generally, partake of the same character. They also are impulsive and emotional, and averse to action founded on the relation of cause and effect. Nature is slow and systematic, but certain. They have no patience to walk in the paths of nature. They desire to seize an immediate advantage; their perceptions are all near and direct; the distant and remote have no charms for their understandings. Yet nature pursues her own course. Reckless conduct and bad cultivation in spring bring a scanty harvest in autumn; early marriages bring children and destitution. Irish capitalists have an uneducated, untrained, impatient, and impulsive people to deal with as their labourers or artisans in manufactures; and experience shews that the trained brain beats the untrained brain in every kind of work. The Scotch plough and cart go half a mile an hour faster than those of untrained England and Ireland; the trained brains of Birmingham and Manchester give four strokes of the hammer for three given in Scotland and for two in untrained Ireland. This in itself is a reason why Irish manufacturers will long find it difficult to compete with English. The same quality and amount of work cannot be obtained from uneducated and untrained as from trained brains. The women are superior to the men in steadiness of application and aptitude. They work in factories, and knit in woollen, cotton, linen, and silk with great perseverance and

skill. If you talk to an Irishman about his destitution being his own fault, he denies that it is so, and claims support from the rich as a right. He has a right to live, and offers to work. He is wholly ignorant of the conditions on which God's Providence gives the right to live, and never dreams that he is bound to fulfil them."

Writing to Mr Cobden, and urging him to take up the cause of Ireland, he explains still further the impressions made upon him during this visit:

"Positively Ireland is out of joint from top to toe, and the capricious tyranny and oppression of four centuries have actually *deranged* the Irish mind to some extent. The reason why you cannot find three Irish members agreeing in anything is that with the present condition of land rights, of sectarian animosity, of political hatred, and of general demoralisation, an angel from heaven could propose nothing which two other angels would approve of, if the thing proposed were not a thorough revision of the whole fabric of society in Ireland, and the application of moral and physical force to bring all things and parties to natural foundations. The system is so thoroughly rotten, and men's minds are so wildly exasperated, that no patching measures will do. It appears to me that the evils will go on accumulating, and that Ireland will force a social revolution, not only in herself but in England, if some genius does not arise, and the English nation does not come forward to support him, to avert it by a radical revision of Irish laws and institutions. In Ireland law itself is a mockery. I lived with a friend who had been for thirty years the partner of the solicitor for the crown for the counties of Dublin, Kildare, and one or two more, and he admitted to me, on close questioning, that at no time could the jurors in political trials be taken honestly by rotation as they stood on the roll, but that in the best of times they were selected by the officers of the government. No convictions could ever be obtained otherways. Every body knows this, and also that conviction by a jury is a mere government condemnation. Trial by jury, therefore, in such cases is a mockery. It is an unreal shadow set up in the place of the reality of justice. Now, can you wonder at the Irish mind becoming itself perverted when it deals constantly with nothing but perversions in everything connected with the state, church, law, and the condition of heritable rights? It puzzles me to find any

institution really sound in that country. And if you, as a moral and independent Englishman, would state all this in Parliament, after you had seen it, you would do a great deal to open the eyes of England to the necessity of new measures. The same facts stated by Irish or party members are not believed, and do not tell on the public mind. New measures must be *radical*, and force will be needed to effect them."

A few days before leaving Dublin, Combe accompanied Archbishop Whately to the National Schools, where an examination was held in presence of the Lord Lieutenant, Lord Clarendon, and Lady Clarendon, Lord and Lady John Russell, and other persons of note, to all of whom he was introduced. When the inspection of the school had terminated, Lady John Russell asked Combe to examine the head of her stepdaughter, who was then about six or seven years, and of her own son, aged between three and four years, and they withdrew to a private room for the purpose. "She said she regarded the examination as serious, and begged to be alone; even Lady Clarendon was requested to retire. Lord John sat at my right hand, her Ladyship at my left, and I proceeded." He described the development of the children, and at the same time he had an opportunity of studying the statesman himself. The following extracts are from his journal, 7th September 1848:—

"Lord John Russell is a little man, with a high bilious and nervous temperament. His lungs are large for his stature, and his head is rather large for his stature, although not much so. His anterior lobe is large in length and breadth and of average height; both the perceptive and reflective regions are well developed. The head is pretty broad, and Cautiousness and Secretiveness are large. The coronal region is only moderately high, Veneration and Firmness being the predominating organs: Benevolence and Conscientiousness are only full. Self-esteem and Love of Approbation are full, but not predominating. Intellect, Cautiousness, Secretiveness, and Firmness are the leading organs. On looking at this head, the cause of the discontent, mingled with personal respect, which is nearly universal in regard to his premiership was evident. He is exactly what

*Punch* said—'not strong enough for the place.' His Veneration predominating over Conscientiousness and Benevolence, his average-sized brain, and his large Cautiousness and Secretiveness, account for his subjection to religious parties, and for his want of reliance on a great moral principle to achieve its own triumph. This accounts also for his countenance of O'Connell's humbug, and for his sympathy generally with priests.

"Lord Clarendon is in the prime of life, of a nervous and sanguine temperament, tall and handsome. His brain is large; his anterior lobe is large, in all dimensions, the lower region slightly predominating. His coronal region is beautifully developed; Conscientiousness and Firmness are decidedly large, supported by large Benevolence and full Veneration. The base is not large in proportion to these organs, but sufficiently so to give force of character. Cautiousness, Self-esteem, and Love of Approbation are well developed, but Secretiveness is minus. His look is bland and simple, and his manners extremely agreeable. Lady Clarendon has a large Benevolence and good anterior lobe, and looked very pleasing. She came up to me and whispered—'Have you observed Lord Clarendon's head?'—'I have.' It is partially bald and well marked, and therefore easily observable. 'What do you think of it?'—'That his Excellency will be the future Prime Minister of England.' 'Why do you say so?'—'Because his brain is large and active; he has large intellectual organs, large moral organs, and just so much of the animal organs as to give him energy of character, without disturbing his judgment.' 'I am so glad that his head bears out his character.' Here she was forced to leave me. This was not flattery but conviction. It is a head capable of understanding, having confidence in, and acting on great principles, independently of parties and small interests; in short, the very head we want."

On the 15th September the Combes travelled by rail to Drogheda, and thence by coach to Belfast, in order to spend a week with Mr John Dunville at Richmond Park. Here they were introduced to a new circle, and Combe observed that the people were widely different from the Dublin Irish. They were slow and deliberate in their manners, and consecutive in their speech; their heads displayed more of the coronal and reflecting regions, and their brains were larger. A Unitarian

clergyman, Dr Montgomery, who had just returned from Meath, told him that that county was rich in pasture lands, and possessed by large proprietors and extensive grazing farmers, the people being driven to subsist in holes in the bogs, covered over and converted into huts. To protect the cattle from the people the following plan was adopted: the catholic priests had each 10 to 20 cows pastured gratis by the proprietors and farmers. It was widely proclaimed that the priest had a cow on the farm, but only one person knew which was his; the people believed that if they stole or maimed a priest's cow they would be inevitably damned; and so lest they should take or injure it by mistake they were obliged to respect them all!

After the enjoyment of a week's hospitality at Richmond Lodge, the Combes returned to Edinburgh. The excursion had been full of experiences; of cordial admiration for the kindliness of the people, and of sorrow for the unhappy condition of their country. "Poor Ireland!" Combe wrote when he reached home; "it is sad to see her so miserable when she can make her guests so happy. I have written in the *Scotsman* a series of papers on her condition, and am sorry that this is all I can do to relieve her."

There was one subject which had always interested him and which was more or less closely interwoven with all the other subjects of education, poor law, revolutions, the working classes, and the state of Ireland, namely, the question of currency. During the period dealt with in this chapter, he had written much on it in the *Scotsman* as leaders and separate articles; and in his sketch "John Bull in the Bank Parlour," published 29th December 1847, he had given a popular explanation of the reasons why a specie currency was the safest and the most honest, as well as demanded by the state of trade. In this sketch John Bull meets in the bank parlour a number of merchants and manufacturers, who are urgently begging for more paper accommodation, and he roundly rates them for sending afloat air bubbles which are extinguished by the first puff of adverse

wind. He argued for a total and immediate abolition of all paper currency which was not represented by pounds sterling at the command of the bank. On this subject he maintained an extensive correspondence with Lord Dunfermline, Mr Cobden (who were entirely of his way of thinking), Mr M. B. Sampson and others. Explaining to Mr Cobden some of the circumstances which led him to his conclusions, he said—

"During the French War I was in full practice as a writer to the signet among the manufacturing and mercantile classes, and their bankruptcies gave me income and also knowledge. They rendered it my duty to trace the *causes* of the failures and the direction in which the deficient assets had gone. The Scotch banks then were placed under no restraints, except those imposed by their own discretion. The result of my investigations was the actual demonstration that the bankrupts were the bold, generally imprudent, ambitious or avaricious men who, by means of bank discounts and accommodations, had carried on a trade greatly beyond the limits warranted by their own capital and ability, and that the contraction of the bank issues brought them down, because they had no solid basis of their own. I saw that the banks generally contrived, by means of securities, to avoid loss, and that the whole deficiency, in the end, came out of the pockets of the men who *had* capital, and were able to stand loss. During the period of free discounting, I saw that the speculative class raised every market by their reckless competition, and distanced the prudent capitalist by the extent of their transactions and the boldness of their adventures. *They* had little or nothing to lose, and everything to gain, and speculation was their element."

All this he regarded as an immoral and unsound condition of trade; and it was a source of keen satisfaction to him when Cobden condemned the entire system of paper currency. Combe had done so in 1826, and amongst all his associates he found none to agree with him; and he repeated his reasons for the opinion in the appendix to the "Moral Philosophy," 1840. He had become more convinced than ever that a paper currency was a moral as well as a commercial blunder by the occurrences he witnessed in America in 1839–1840; and the

events of 1847 and subsequent years confirmed him in this view. He had watched the progress of paper currency at home and abroad, and had always observed the same results—a period of unhealthy inflation followed by a collapse, which involved not only the speculators, but the whole country in confusion and loss. In public and in private he did his utmost to counteract the evil by exposing its source; and his views met with the approval of some of the most distinguished financiers and accountants.

During this period of 1847–48 Phrenology was not gaining ground, although a new society was founded in Glasgow in March 1848; the Edinburgh society was in a languishing condition; the lectureship in the Andersonian University had proved a failure, and the publication of the *Phrenological Journal* had ceased. But the philosophy which Combe had evolved from Phrenology was spreading rapidly, and taking possession of many minds that were little acquainted with the science. Its principles were directing the opinions of men in matters of education and religion to a much larger extent than appeared on the surface. The "System of Phrenology" sold very slowly, but the "Constitution of Man" had now reached a sale of 80,000 copies in this country alone. This was in Combe's eyes the triumph of Phrenology, for to it all the rest was due; and he lamented the ignorance of many, and the cowardice of others, which prevented the open acknowledgment of the source from which they drew their liberal aspirations. He was as indomitable as ever in his defence of it, and two of his most forcible productions in this respect were written in 1847. The first was a reply to an article on Phrenology in the *British Quarterly Review* by Dr David Skae,* of the Morningside Asylum, Edinburgh; the second was an answer to a work written by the Rev. C. J. Kennedy, Paisley,† entitled "Nature and Revelation Har-

* *Phrenological Journal*, p. 63, Vol. XX.
† *Phrenological Journal*, p. 425, Vol. XX.

monised; a Defence of Scripture Truths assailed in the 'Constitution of Man,'" published under the sanction of the "Scottish Association for Opposing Prevalent Errors." This association had been formed in 1845 to undo the evils perpetrated by the Pope, the Puseyites, George Combe, and the author of the "Vestiges of Creation." Combe paid little respect to the association; but he frankly and even cordially admitted that Mr Kennedy's book was the best that had been written against the "Constitution of Man." It was free from vituperation, and was in some instances ingeniously argued. In dealing with it he showed that it assumed throughout that the Calvinistic *interpretations* of the Bible were the Scriptures; that the writer fell into the usual confusion of the evangelical mind in not distinguishing the natural laws as the ordinances of God; and that Mr Kennedy's argument, carried to its logical issue, would encourage men to obey or disobey the divine order of nature as their judgment might direct, thus asserting wisdom superior to that of the Creator. On the other hand, the doctrine taught in the "Constitution" was that of the necessity of implicit obedience to the unvarying laws which God had established, and that disobedience brought certain punishment, however good might be the intention which prompted the disobedience.

Amongst the friends whom he lost by death during this period was Sir George Stewart Mackenzie, who died at Kinellan, near Edinburgh, on the 26th October 1848. Sir George had been one of the earliest converts to Phrenology after the visit of Spurzheim to Scotland in 1816, an active supporter of the Edinburgh society from its foundation, and a frequent contributor to the *Phrenological Journal.* He published a number of pamphlets and books on a variety of subjects, but chiefly of a scientific character; and to the end he continued on terms of intimacy with Combe. As one of the minor incidents of Combe's life in 1848, it may be mentioned that he was enrolled on the Commission of the Peace.

## CHAPTER VIII.

1849–1851—BIOGRAPHY OF ANDREW COMBE—PARENTS—"CAUSES AND CURE OF PAUPERISM"—BARRACKS AND VENTILATION—REMEDIES FOR IRELAND—HELIGOLAND—GERMANY AND REVOLUTIONS—"GERMANY REVISITED IN 1849-50"—THE PULSZKYS—REFUGEES IN LONDON—SPIES—PROPOSED NEW WORKS—DEATH OF MARION COX—"REASONS FOR DECLINING TO SUBSCRIBE THE RESOLUTIONS IN FAVOUR OF NATIONAL EDUCATION IN SCOTLAND"—THE OBJECTS OF THE SECULARISTS—LORD MELGUND'S BILL—LORD JOHN RUSSELL AND EDUCATION — A LECTURING TOUR — EDWARD LOMBE — REV. DR ROBERT BUCHANAN AND THE "CONSTITUTION OF MAN"—DEMONSTRATION IN MANCHESTER—LAST PUBLIC SPEECH—ILLNESS—LONDON—THE BIRKBECK SCHOOLS—THE QUEEN—LETTER FROM PRINCE ALBERT—THE EXISTENCE OF GOD.

In January 1849 Combe had completed the first twenty years of his brother's biography; and this portion he found the most difficult to write. He desired to explain the conditions under which the Doctor and the other children had been reared in Livingston's Yards, and at the same time to keep distinctly before the reader the upright, affectionate, and intelligent character of their parents. In attempting to do this he failed to satisfy some of his relatives, who thought the revelations painful and unnecessary; but Combe regarded them as forming the key to a right understanding of his brother's character, and as a principal cause of the earnest devotion of his thoughts to the study of the conditions of health. In submission to the objections which were raised, Combe modified this portion of the memoir; but in his fragment of autobiography he has given the details of the system of training to which he attributed much of the feebleness of constitution that he and his brothers and sisters suffered from during life.

It is the system, however, to which he refers this misfortune; his parents he regarded with deep reverence and affection, and had no thought of casting the faintest reflection upon them. He lamented their deficient knowledge; he loved themselves. "The last act of my life towards my father," he wrote, "was walking home with him from my house in Stockbridge, where he had dined with me, on a fine autumn moonlight night, prompted by the sole pleasure of showing him a little attention; for he did not *need* my assistance; and the recollection of this incident is very pleasant to me to this day." Writing to Dr Boardman, he said—"I envy you in nothing but in the inexpressible satisfaction to have your parents alive to see, participate in, and enjoy your success. Often have I wished that my father and mother could have seen the career of their family. Humble although it be, it would have more than satisfied their ambition, and given them the purest pleasure." He submitted the proofs of the early chapters of the biography to Sir James Clark, Lord Dunfermline, Archbishop Whately, Cobden, and other friends, in order to have their opinion to guide him in the form he had adopted, and to help him in deciding how far he should comply with the views of his nephews and nieces. The effect of the communications he received was to convince him that the opinions of the world would be as various as the characters of the readers. He put the proofs and manuscript aside for three months; then he took them up again with the determination to follow the dictates of his own nature in doing his best to discharge the duty he had undertaken. He continued, however, to consult Robert and Marion Cox, who were the literary executors of Dr Combe; and Miss Cox watched the progress of the memoir with affectionate solicitude. The progress was slower than Combe had anticipated. "I am constantly employed with the biography," he wrote to Sir James Clark, 19th January 1849, "but advance at a snail's pace. I have to read often for three hours small crossed letters, and find only ten lines to print in them all, and

yet I could not leave them unread. It will take me two years to get the volume completed, unless the duty becomes lighter hereafter." But he had not proceeded far when the difficulties of producing a book which should be interesting to the general reader, without sacrificing the medical details and observations which were most valuable in themselves, and would be most interesting to scientific readers, stirred him to an exclamation of despair. "In short, it is a task which I should never have undertaken; but affection for my brother, and the difficulty of finding any one else who would do it well, led me into the error." He kept steadily in view an observation made by Cobden, which entirely agreed with his own conviction as to the form of the work—"In my judgment," said Cobden, "the most interesting form of biography is that of autobiography; and next to that is the plan of allowing the subject to speak for himself through letters or conversations. The reader will generally make his own criticisms and reflections with little aid from the compiler."

Whilst persevering with the biography, he continued to give attention to educational and other public affairs, and he wrote a series of letters for the *Scotsman* on the "Causes and cure of Pauperism." He was sensible of the difficulties which had to be overcome before the people could be brought to understand and act upon those principles of economy which he believed would ultimately give them peace and plenty; but his faith in man's destiny never faltered. "God has made man a moral and intellectual being, and he *will* work out his destiny in time," was his creed. The disturbed state of the nation at this time, the restlessness of the working classes, the discontent of Ireland, and the revolutionary spirit of the continent, he attributed to the want of moral faith and of the intellectual perception of the laws of God's providence on the part of legislators and people. He desired to see the millions which were spent on workhouses and jails, and in maintaining armies to keep the peace, applied to "teaching and training the

people in such a way that they might learn to do without workhouses, avoid jails, and themselves preserve order by having neither motive nor inclination to break the law." He regarded the increasing number of barracks in Great Britain as the monuments of increasing wretchedness amongst the lower classes. In Ireland, which was covered with a network of barracks and military posts, the barracks were thickest where misery and destitution were rifest. "No human being can deny that in Ireland the numbers of these barracks are accurate indicators of the misery in each district; and so it is in England and Scotland."

In regard to Ireland he was gratified to see that the remedies for some of the evils of the country, proposed by the Lord Chancellor and Sir John Romilly, were the same as those which he had suggested in the articles written after his visit in the autumn of 1848—namely, efficient measures to convert all subordinate interests in land into fee-simple rights. "That done," he said, "and the poor-rate leviable from land being limited, the foundation will be laid for Ireland's regeneration. All else that is needed is the crushing of the religious sectarian spirit, and the system of political jobbery which has sapped Irish morals to the foundation; and the introduction of sound practical secular education. Time will do the rest. Neither Sir Robert Peel nor any other mortal man *can* regenerate Ireland. *The Irish people must regenerate themselves;* and all that statesmen can do is to remove obstacles and furnish facilities for their doing so."

At the end of July the Combes, accompanied by Mr Stirling Lacon, a nephew of Miss Stirling Graham, left Edinburgh to visit Germany again. There was a pause in the political disturbances of that country, and Combe was anxious to see the aspect it presented after the recent revolutions. At Hull they found the steamer for Antwerp small, dirty, and were told that it was slow. They therefore decided to sail for Hamburg, as they were assured that although the Danes were then

blockading the Elbe, the blockade was to be raised immediately. Accordingly they sailed in the *Helen Macgregor* on the night of the 1st August, and they had a mild experience of the inconveniences of war; for early next morning they were stopped by a Danish frigate, informed that the blockade was not yet raised, and were obliged to proceed to Heligoland to await permission to continue the passage. The *Helen Macgregor* anchored about three miles from the island, and the sea was so rough that the passengers were obliged to remain on board all day and night. On the following morning they were taken on shore by the ship's boats, and after spending Saturday and Sunday on the island—where they were hospitably entertained by the governor, Captain Hindmarsh—they again embarked for Hamburg, the enforced visit to Heligoland forming a pleasant incident in their travels. In a letter to Horace Mann, 24th October 1849, Combe gives the result of his observations during this tour.

"We landed at Hamburg, and visited Berlin, Dresden, Leipzig, Hof, Bamberg, and Heidelberg, and returned by the Rhine, Aix-la-Chapelle, and Antwerp. The whole tour was accomplished by steamboats or rail-roads, except a distance of twenty-two English miles between Leipzig and Hof, one day's coaching from Bamberg to Würzburg, and two days ditto from Würzburg to Heidelberg. The rail-roads are excellent, and their great extension has so diminished the expense of travelling that we brought home thirty per cent. of our calculated expenditure. The country is all cultivated, notwithstanding its troubles, and the grain and fruit crops were most abundant. Physically, therefore, Germany has many good things. But morally and politically affairs are less satisfactory. There has been a great change in the German mind since you and we travelled there,—indeed, since 1847 when we revisited the country. Generally speaking, the *bonhommie*, life-enjoying quality, and extreme politeness have disappeared. The German is grave and earnest; the tea-gardens are less frequented; *the music at dinner has totally disappeared;* the eternal bowing and lifting of the hat on passing an acquaintance are gone, except among the old men; nay, more, the innkeepers now rarely wish you a "glückliche Reise" at parting, and they and

the shopkeepers frequently take your money and do not say thank you. Professor Mittermayer, the very *beau ideal* of courtesy and devotion to conventional honour, has omitted 'Geheimer Rath' from his calling card, and is now simply 'Professor Mittermayer, aus Heidelberg.' These are the results of the preaching of democracy in their assemblies and by their press. There is a strong conservative party in the country, which is now completely in the ascendant; and the democratic party is crest-fallen, sullen, and silent. They, *i.e.*, the democrats, all affirm that in future the political condition of Germany will be worse than it has ever been; and I in vain tried to persuade some intelligent men whom we met that this is a mistake. I saw unequivocal proofs that a great advance has been made in constitutional freedom, which cannot be all lost. Austria, from its ignorance, will profit least, but northern and south-western Germany will gain much. I was pained to find so many of my friends sufferers. Von Strulve of Mannheim has lost character even with his own party, and is an exile. We know Theresa Walters, the most accomplished daughter of a banker in Vienna, and herself in possession of £24,000. She married Pulszky, the Austrian Secretary for Hungary, a man of great wealth. He joined the insurrection, and we lately saw them in London penniless, their whole fortune forfeited, and the Austrians hunting after their children, whom they were forced to leave behind in charge of a peasant family who are secreting them, and who have hitherto baffled the Austrian pursuit. Mr Noel, an Englishman married to a Bohemian lady, told me that of forty-five members of the Phrenological Society of Dresden, the brightest constellation of moral and intellectual gifts in that city last year, *every* one is now either killed, in prison, or fugitive. Dresden and Heidelberg were in a state of siege (legally not actually) when we were there, and at Dresden we were received from the railway carriages with levelled bayonets, and so kept until our passports were examined. Afterwards we had no trouble. At Heidelberg every house has to maintain, in bed and board, its quota of Prussian soldiers, who pay for nothing. But, in justice to the men, I must say that they behave extremely well, and all the rich citizens are glad to maintain them as a protection from worse evils, viz., the anarchy, exactions, and alarm of revolution.

"The kings and princes who broke their faith plighted in 1816 to the people to give them free institutions are the real authors of all the evils; but the people were not practically or theoretically prepared for freedom. They might as beneficially

for themselves have knocked down the engineer of their own railway trains, mounted on the engine and set off with the whole train at their heels, thinking to drive it faster and better than he, as displaced their accustomed rulers in a day, and assumed the reins of the social machine themselves; yet this last was what the republican party aimed at, and by constantly driving at it, sometimes openly, but more frequently covertly, paralyzed the power of more moderate men, and enabled the kings and princes ultimately to triumph. These democrats are now blamed as the *causes of all* the German failures and sufferings, and the kings and princes have escaped for the time from the odium of being the true authors of the disasters.

"These revolutions have brought to light two instructive facts, important for you to know. 1st. The Prussian system of education, with all its merits, has utterly omitted to teach the elements of social science in its schools, and the effects were seen to be at once great and disastrous. A number of intelligent persons told me that the peasantry and urban workmen generally expected a direct and immediate increase of their property from revolution, and that the most unprincipled demagogues, by availing themselves of this expectation and flattering it, carried them off completely from the influence and direction of more rational and honest men. Their increase of wealth could come only from plunder of the rich, or from a miracle—for they never assumed that they were to work harder and create it, or live more economically and save it; nor did they admit of the necessity of time to enable them, under the influence of freedom, to improve their several processes of art, and abridge their labour by more efficient machinery and implements. Not one of these ideas had been taught to them in the schools, and they were too excited to learn them amidst a revolution. My informants blamed only the demagogue leaders, who, they said, should have known, and who, in fact, did know better, for spreading these delusions, and you would have been amused to observe their surprise when I turned the tables on the kings and princes, and charged *them*, who for thirty years have had the uncontrolled direction of the primary and gymnasium schools, with the whole guilt, because they had never taught one word of sound social science, *i.e.*, political economy, to the children. I told them that in London and Edinburgh such teaching had been tried in schools for children of the working classes, and that they had comprehended it; and unless their understandings fail when they enter into life it will be difficult to cram them

with such delusions. Now, your *population needs such teaching above all others*, and its immediate introduction will save you from much suffering. The author of it in common schools is Mr William Ellis, manager of the Mutual Marine Insurance Company of London, who is the author of an article on the 'State of the Nations' in the last number of the *Westminster Review*, which I earnestly recommend to your notice. He is the founder also of our secular school in Edinburgh, an account of which I have sent to you in the anti-slavery box which goes from Edinburgh to Boston in November. I have prepared an account of Mr Ellis's schools in London for the *Scotsman*, which I shall send to you when published. So highly do I value Mr Ellis's plan that I consider it more important for your people than anything you have yet done. It is needed to crown your admirable fabric.

"The second instructive fact is the inefficiency of revealed religion, as at present existing in the German mind, to control or direct the people in revolution. This has been demonstrated by palpable facts. In Baden great numbers of schoolmasters, 15 Protestant and 13 Roman Catholic clergymen, nearly all the soldiers, and most of the peasantry joined the insurrection, and the flocks only of three or four *Evangelical* clergymen, called 'Pietisten' in Germany, were restrained by the efforts of their spiritual guides from joining the standard of rebellion. This fact has stimulated the kings and princes to encourage the 'Pietisten,' and try to bring all the people under the influence of belief in the supernatural as a means of securing social order and political obedience. In my opinion, this will be impossible; and I see that the Rev. James Martineau of Liverpool, who has spent nearly a year in Germany, views the case in the same light. In the *Liverpool Journal* of 20th October 1849, p. 5, col. 3, he says, 'I speak not now of the theological and critical state of Germany, but I speak of that practical religion of the people which influences the heart, determines the national character, and which hitherto through periods of German history has determined the fortunes of the nation. I do not hesitate to say that I believe that the influence of Christianity upon the political future and the social condition of Germany is now extinct; that the great changes which are going on there are going on independent of it, growing out of new sources, and arising from classes where the old church influences have entirely ceased.' In France, the same thing may be predicated still more strongly and correctly than of Germany. I

do not go quite so far as Mr Martineau, because the Roman Catholic faith still influences many of the lower classes socially, and 'Pietism' animates a considerable minority of the middle classes; but in neither is their religion in harmony with any sound social or political system, so as to act as an operative element in advancing it. What is the practical conclusion from these facts? That the belief in supernatural religion is no longer capable of directing social interests. Science has revealed an all-pervading system of natural causation, embracing morals as well as physics, which has superseded it. Nevertheless, the believers in the supernatural control all our schools, and much of our public teaching, and they shape secular instruction into that form which will render it least hostile to their own principles. The result is that the people are left without any religion which is practical, and any science of social life based on nature, and in their social, moral, and political conduct, therefore, they are left solely to the guidance of common sense. But every man's common sense differs from that of his neighbour; and when unbased in nature and unsystematized it becomes the sole director of great movements, only conflict, error, disappointment, and misery can ensue. By teaching Phrenology in our secular school, I am laying a natural foundation of religion and morals, in the minds of our children, and I see that they are drinking the views presented to them eagerly in. By teaching Anatomy and Physiology we are laying a natural foundation for the laws of health; and by teaching them the principles of a sound Social Economy, we are laying the natural foundations of a rational social action. This instruction will prove the bulwark of social order when the supernatural falls into decay, and posterity will thank us as sincerely as our opponents now abuse us for our present course of action."

From theory and observation Combe had always disliked republics, because he saw that the bold and unscrupulous ruled in them, and the good and refined retired. He was confirmed in this conviction by all he saw during his present tour in Germany, and by his personal intercourse with several of the leading revolutionists. But his sympathy with the people was so strong that Germany was always his favourite summer resort. He returned to the country in 1850, and continued his earnest study of its social and political condi-

tion. The result of his observations was given in three articles in the *Scotsman*, under the title of "Germany Revisited in 1849–1850," published in November of the latter year.

In his visits to London he saw a good deal of his friends the Pulszkys (referred to in the letter to Horace Mann), previous to their departure to America with Kossuth. Their children had been rescued by Madame Troya, an energetic and benevolent lady, who, although nearing her sixtieth year, undertook this perilous act of friendship, and carried it out successfully. She travelled 18 days and six nights by all manner of zig-zag routes between Hungary and Belgium, passing her young charges off as her grandchildren. Thinking of Madame Pulszky, whom he had known as the bright intellectual Theresa Walter, Combe wrote:—

"A revolution is a terrible occurrence. Here are she and her husband, accomplished and highly talented persons, lately possessed of great wealth, large territorial domains (she told us that she could lodge forty visitors in her castle in Hungary without inconvenience) and holding a high position in society, reduced to poverty, fugitives from home, living in small apartments above a bookseller's shop in No. 8 Sussex Gardens. She acts as nursery maid to her three children; has cut off her beautiful hair to save the time, labour, and expense of dressing it; and she is writing books to increase her income. Yet she bears it all with an admirable spirit."

Referring to the Hungarian and German refugees, Combe made the following interesting notes:—

"Pulszky gave a picture of the revolutionary party in England. When they arrive, says he, they are naturally irritated by their failure and unhappy position. They come to him and demand money; he has none to give them. 'You wear a gold watch, and no man ever knew the pains of want who could afford to keep a gold watch!' 'But we work. Come and you will see Madame Pulszky and me always writing for our bread. If you cannot write, you must work in some other line.' But they do not like to work. They say: 'We will deliver Europe.' 'Very well; deliver Europe, but do not refuse

to work till you have done so.' 'Let us form a committee to hurl the tyrants from their thrones.' 'Certainly, but a committee of penniless men cannot do this.' 'All Europe is ready to rise; our cause is the cause of all.' 'Well, suppose we form a committee?' 'Every member must be sworn on the dagger.' 'Nonsense, this is a conspiracy. I never was a conspirator, and never will be. Besides, the age of the dagger is past. You know that if any one of you should kill another with the dagger, he could not live in England. Let us dispense with oaths and the dagger.' The committee meet; furious speeches are made, and letters from the continent are read, representing all things and everybody as ready for a rising. Resolutions are proposed, seconded, and adopted, to deliver Europe, and ordered to be sent to the committees abroad. The committee breaks up, and the one-half of them goes to the Austrian and Prussian ambassadors and to the English foreign police and sells a report of the proceedings for £5! Pulszky says that one-half of the refugees are spies; that the foreign police come to detect thieves at the Exhibition [1851] find no foreign thieves, for it would not pay them to come, and are employed as spies on the political exiles. He heard the head of the Prussian police say: 'I am tired to death of this life. I cannot speak English, and none of my countrymen will speak to me. At the *table d'hôte,* if I am silent, they say—You see he does not speak; he is listening to every word that is spoken; he will report it; take care. If I speak, they say—You see how he tries to win our confidence that he may betray us!' Pulszky acts openly, as a man of sense and a gentleman, and is on good terms with the Prussian ambassador, Bunsen, and the English officials; but he asserts positively that the secret service money of England is employed in paying spies on the refugees, and that Lord Palmerston communicates the information to Austria and Prussia. Madame Pulszky's estate is not sold; none of the forfeited estates are sold, for nobody will buy them. Her father has taken a lease of it, in name of Count Breda, for six years at 26,000 florins per annum, in order to save it from waste."

Combe returned to Edinburgh at the end of September 1849 with renewed vigour, and his mind full of projects for the future. He made the following notes in his journal on the 21st October:—

"This is my 62nd birthday, and I am in excellent health,

and find my cerebral vigour restored. Cecy is greatly improved in health, and all the members of our family are well. I thank the great Author of my existence for so many sources of enjoyment. May I be able to discharge efficiently whatever duty yet remains to me to fulfil. Three works I should like yet to accomplish, besides finishing my brother Andrew's Life, now in the press, namely, a work on Natural and Revealed Religion; the Philosophy of Art, Painting, and Sculpture; and my own Life. But my mother and many of the Newton family died at 63, or shortly after that age, and the Combes rarely survived 70, even when they reached so far. I am, therefore, numbering my days, and am prepared to go when called, not doubting that other and better labourers will in due season appear to execute whatever work society really needs, whether my intentions are fulfilled or not. My friends tell me that I am only too earnest and too diligent to apply every hour of time to serious objects; but the decay of cerebral vigour by age, although my health is excellent, limits my exertions to a few hours daily, and the intensity, although, perhaps, not the soundness of the thinking, is much abridged, I am deeply conscious, however, that it is a duty I owe to my relations, to my dear Cecy and myself, not, in eagerness to accomplish all I desire, to overdraw my strength, and cut short the space of life which, under judicious management, may still be within my reach."

He lived to complete the two first named works and to begin the third. In the meanwhile his energies were given almost entirely to the biography of Dr Combe. He was interrupted by a severe cold caught in December, which produced an irritation of the mucous membrane of the lungs; but by taking prompt measures to arrest the malady, he was able in January to say that he was better and again enjoying life. He was, however, subject from this date to frequent attacks of cold, and much care became necessary to avert a serious affection of the chest. The work was finished on the 1st March 1850; the sheets had been forwarded to Dr John Bell, Philadelphia, as they were completed, in order to enable him to publish the book in America simultaneously with the appearance of the English edition. The task had been a labour of love to Combe, notwithstanding the anxiety which attended its

slow growth. "It is impossible to convey to you an idea of the anxiety and labour which that work cost me," he wrote to Horace Mann. "All my other works sprung spontaneously from my brain, and I have no merit in having written them. This one was produced under the dictates of affection and duty, and amidst fear and trembling. It occupied me two years, and during that time I was forced twice to suspend my labours for two or three months." The pleasure with which he now saw it completed was saddened by the death of his niece, Marion Cox, on the 22nd April, only a few weeks after the book was published. Her attachment to Dr Combe had been proved by the devotion of her life to him; and in the preparation of his biography she took an active and valuable part in reading masses of manuscript, in selecting letters, and in making suggestions illustrative of his ways and character. She read the proofs eagerly, and her friends remarked as a strange coincidence that it was only when the last sheet had passed through the press that she showed symptoms of serious illness. Then she considered her mission to have been fulfilled, and she was ready to depart. Combe regarded her as he might have done a daughter: as one of her father's trustees, she had been left to his care in 1815; when attending school, she had lived with him; and after his sister Jane left him, she had taken charge of his house until he married.

"She was a treasure of the highest value," he wrote. "Utterly unselfish, active without ceasing in works of benevolence; possessed of a strong and a sound judgment, and most affectionate dispositions, she has left an irremediable blank in our family. I find it difficult to believe her dead." Again, describing her last days to his brother William: "She told me that she considered it a great privilege to have been permitted by God to live and to fulfil the portion of duty assigned to her in His mighty plans. She viewed herself as an atom of the moral creation, but that as it is composed of atoms, and must have a glorious purpose, it was a satisfying honour to her to have been called into existence, and to have been allowed to act her little part in the stupendous scheme."

She had been confined to bed three weeks, and every day had brought pleasing letters from readers of the biography of Andrew Combe, expressive of their admiration of the man and of satisfaction with the manner in which his life had been written. These afforded her the utmost content. On the day of her death Combe says: "To-day, Robert Cox and I have bought four grave spaces in the Dean Cemetery, where she and he, and Cecy and I are to lie together." The sense that his own time was not far distant induced him to keep his affairs in strict order, so that after he should be gone they would give as little trouble as possible to his survivors. He was especially careful about the settlement of his shares in American railway and other stocks, and at once transferred them to trustees. In this Dr Andrew Boardman, who was now a successful lawyer in New York, repaid by valuable advice and assistance the services Combe had formerly rendered him.

Although living, as he often said, with the thought of death almost constantly in his mind, he was not hypochondriacal. He was still active in correspondence, and in helping forward the great cause of education. He was conscious that if he were no prophet in his own land, he was at any rate an influence that was feared by the evangelical party. An association was formed by the leaders of the Free Church, the United Presbyterian, and a few liberal laymen, for the promotion of national education in Scotland; and an outline of the scheme was drawn up. But orders were given that it should not be shown to Combe, and he and Mr Simpson were excluded from participation in the project as dangerous persons. A manifesto was subsequently prepared by the association, and the public invited to sign it, with a view to moving in Parliament for a measure to carry the design into effect. All Combe's friends subscribed it; but he declined to do so, and published his reasons for this refusal in a small pamphlet which was distributed gratis. His reasons were briefly stated to Dr Hodgson thus:—

"1st, It does not suggest whence the funds are to come.

"2d, It speaks of a *sound religious education* as a primary object in national schools. By these words the clergy mean the Catechism and Confession of Faith; and the liberals *know* that it is so; and I object to this.

"3d, It proposes that the subjects to be taught in the schools shall be determined by a *majority of the heads of families;* which means by the evangelical sects moved by the clergy.

"4th, If the money is to come from the Exchequer, or to be raised by local taxation, it will be contributed partly by Roman Catholics, Unitarians, Jews, and Deists, and yet the orthodox majority of heads of families will set the convictions and rights of these parties at nought in the management of the schools."

Those of his friends who had signed the resolutions of the association admitted that their object was to bring the matter into Parliament, and there they hoped a really liberal scheme embracing all sects would be formed. But this was a false principle of action, and Combe opposed it. The evangelical party was united, the liberal was not; the former denounced their opponents as "infidels," and traders and professional men fearing the consequences to their worldly interests, shrank from a contest with them. The result would be that this scheme devised by the clergy would deliver education fairly into their hands, and Combe believed that it was the anticipation of this issue that had induced so many of them to adopt the resolutions, which were in some respects apparently of a liberal tendency. Whilst he was lamenting the fears which restrained so many men from actively opposing the church party, he received a curious proof of the social tyranny exercised over those who dared openly to wander out of the orthodox grooves. It was a note from Mr G. H. Lewes asking him to join a "Confidential Society," the members of which were to be men of liberal views in philosophy and politics. They were to hold private meetings, and to discuss all subjects freely as amongst friends, each member being bound to respect everything that was said as

confidential, the object being to foster the free interchange of thought, which was at the time restricted by social considerations. Combe was unable to see the advantages of such a society, however; for, in private, men who understood each other were accustomed to speak freely, and confidence was generally observed amongst them.

The objects for which Combe and the other secularists had to fight so desperately, to endure contumely, and to risk social ruin, were simply these: That the right of every individual to his own form of religion should be respected; that schools should be extended, supported partially by a rate; that the management of them should be placed in the hands of the rate-payers, under the control of a central board; and that they should be limited to secular instruction, leaving time for religious instruction apart by teachers approved of by the parents of the scholars. As matters stood, sectarian education was fostered by State grants, which were denied to schools where only secular education prevailed. The Secularists sought the total abolition of this injustice. Amongst others who were working to this end were the committee of the society, which had now developed into the National School Association, and Dr W. B. Hodgson in Manchester; Mr M'Clelland at the head of the Secular Schools in Glasgow; Mr William Ellis in London, by personal teaching and by a considerable annual expenditure of money; and Combe was co-operating with them all. Lord Melgund, who had visited the Williams school, and who coincided to a large extent with Combe's views, introduced a bill for Scotland into Parliament on 4th June 1851, which would have effected the main objects of the secularists, especially in taking the control of education out of the hands of the clergy. Combe had helped his lordship by suggestions, and by getting up petitions from the working classes of Glasgow, Aberdeen, and Edinburgh, and he was in the House when the motion was brought forward. The second reading of the bill "was negatived by a party vote of 137

Tories to 124 Liberals—majority 13. The impression which the debate made on my mind was that the House consists of common-place men with common-place information, excepting a few superior spirits whose influence is extinguished by the inert mass with which they are associated." He was staying with his nephew, Dr Abram Cox, at Kingston-on-Thames at the time, and on the 7th June he writes in his Journal:—

"In consequence of a note from Lord Melgund I drove to Pembroke Lodge, Richmond Park, and had three quarters of an hour's conversation with Lord John Russell and his lady on the education question, and about their children. They seemed annoyed a little at Lord Melgund's bill being lost. I characterised the speeches of the opponents as purely conservative, destitute of real knowledge of the question and of logical connection between their own premises and conclusions, which he said was correct. He asked me to explain how religious instruction was given in America, for he had never understood it. He had been told that the law required the clergy to give some kind of instruction in religion in schools. I said that this was a mistake. In Massachusetts the law allowed the Bible to be read in schools, but without note or comment, and it prohibited absolutely the teaching of doctrines, or the introduction of books calculated to favour the tenets of any particular sect. I described the churches in that state with a large schoolhouse on the basement floor, and the church above. Into these schoolhouses the clergy collected the children, each of his own sect, and gave them religious instruction on the Wednesday or Saturday afternoons, and always on Sundays; and the instruction was far superior in quality to any given by a schoolmaster. This was new to Lord John. He said that he hoped some solution of the religious difficulty might be found which would admit religion into schools. I told him that I doubted this, and mentioned what Mr Cobden had told me of his experience when he met the chief men of the leading sects at Manchester. He found them irreconcilable. We had some further conversation on the subject; and my impression is that Lord John has never fairly turned his mind to it, and is, in fact, much at sea in regard to the question."

The defeat of Lord Melgund's bill was not a surprise; it was scarcely a disappointment. Combe expected many defeats

before success should be attained; but he was satisfied that the success would come, although he might not live to see it, and he worked steadily for his object despite every discouragement. He entered upon a system of public agitation in favour of national secular education, by means of meetings of the working classes in the chief towns of Scotland, at which addresses were delivered advocating the necessity of education free from clerical control, and urging the people to send petitions to Parliament until the government should be compelled to grant their appeal. His health was daily becoming more and more precarious, and prevented him from doing all that he wished to do in this movement himself; but he was still able to do much, and to inspire others to do more. In his efforts he was staunchly supported by his old friend Mr James Simpson, and together they addressed crowded meetings in Edinburgh on the 21st January, in Glasgow on 18th April, in Aberdeen on 25th April, in Paisley on 29th September, and again in Edinburgh on 25th November 1851. The expenses incurred for halls and advertising were paid by Mr Edward Lombe, of Merton Hall, Wymondham, Norfolk, a gentleman who took great interest in the education question, and who contributed largely to the funds of the Manchester Association.* At Glasgow the Secular Association, and at Aberdeen a

* In opening his address Combe said: "Edward Lombe, Esq., is a landed proprietor in the county of Norfolk. There are sixty-eight tenant farmers on his estates, and he has given them all liberty to shoot game on their farms, and to vote for members of Parliament according to their own opinions, without consulting him as to the merits of the candidates. He has established a college for the education of the people at Sheffield, which flourishes; and he lately expended £1000 in attempting to establish another at Norwich, but, by falling into bad hands, it failed. Nothing daunted by this disappointment, he, a few weeks ago, presented £500 to the National Public School Association in England and Wales. Mr Lombe desires to dedicate a portion of his wealth to the elevation of the labouring classes by means of education; and the instruction which he prefers is in secular knowledge, suited to promote the temporal well-being of industrious persons, leaving to the parents and pastors of each child the duty and responsibility of teaching it denominational theology. I have never seen this beneficent gentleman; but some friend of his, unknown o me, sent to him in Florence, where he chiefly resides, a copy of the first

charge made for admission, paid the expenses of the meetings, and Mr Lombe's subscriptions were applied to the promotion of petitions. The proposition which was submitted to the meetings was one approving of the basis of the Association for National Public School Education in England and Wales, namely, to promote the establishment by law of a system of free schools which—supported by local rates, and managed by local committees elected by the ratepayers—"shall impart secular instruction only; leaving to parents, guardians, and religious teachers the inculcation of doctrinal religion, to afford opportunities for which the schools shall be closed at stated times in each week." A very hearty response was given by the different audiences to the proposition, and to the addresses in support of it delivered by Combe and Mr Simpson. One remarkable phase of Combe's power is apparent in these addresses—that is, the facility with which he varied his theme. Speaking on the same subject and for the same object at comparatively short intervals, he was so full of stores of reflection and argument regarding education that each address was sufficiently distinct from the others to have been the product of a different brain. Indeed, his heart as well as his mind was full of this subject, and it was time and lack of physical strength which stopped him, not any deficiency of fresh argument and striking illustration. On this tour he was making what proved to be his last appearances as a public speaker; and his energy, plain and forcible reasoning, and devotion to the cause had never been displayed more powerfully—he had never carried his hearers more entirely with him than at these meetings.

annual report of Mr William's secular school, and this induced him, unsolicited, to send me £50, one-half to be applied to that school, and the other half in defraying the expenses of this meeting, and of a similar one in Glasgow. I feel honoured in being made the instrument of his bounty; but I beg to remark that I am not commissioned to convey to you any particular views on education as his. You will, therefore, hold me responsible for the particular views which I may now address to you." Mr Lombe sent other donations to the Williams School besides the one mentioned in this extract. He died at Florence on 1st March 1852, aged 52.

The meeting at Edinburgh in November was called to hear a lecture by Combe on "The Comparative Influence of the Natural Sciences and Shorter Catechism on the Civilization of Scotland," and at the close of the proceedings an incident occurred which excited considerable interest. Combe in his lecture had referred to a report presented to the Free Church Assembly by the Rev. Dr Robert Buchanan of the Tron Church, Glasgow, in which that gentleman described the lower classes of his parish as sunk in "almost every species of personal debasement." Dr Buchanan further stated :—

"In that single parish we have met with 151 individuals who proclaim themselves to be infidels. In the case of most of these men the only God they acknowledge is the laws of nature, and the book held in highest reverence among them is some socialist periodical, or perhaps 'Combe's Constitution of Man.'"

Combe remarked with wonder that, according to Dr Robert Buchanan, most of 151 individuals were characterised as infidels, because they "recognise God as manifested in the laws of nature!" He was acquainted with Dr Buchanan, and respected his zeal and talents. Accordingly, feeling curious to discover the effects of this form of infidelity on the condition of the individuals, he asked him for the addresses of some of the men. Dr Buchanan declined to give them, on the ground that he had no right to expose the parties to such inquiries as Combe seemed disposed to institute.

"After the close of the lecture, a working man entered the side room of the hall, and, addressing the lecturer, said: 'Sir, I am one of the men referred to by Dr Buchanan. My name is Charles Don; I live at 59 Trongate, Glasgow; and, happening to be in Edinburgh to-day, I came to hear your lecture. The agent of Dr Buchanan called upon me and examined my books, and made a note of the 'Constitution of Man.' Along with it were two copies of the Bible, Paley's Moral Philosophy, Shakespeare, Byron, and Burns' works, and a variety of other books. Dr Buchanan does not mention them.' The lecturer said: 'Are you sunk in almost every species of personal de-

basement and moral degradation?' 'You may look at me, sir, and judge for yourself.' He was then requested to stand forward and allow a number of gentlemen who were present to see him; they found him to be a strong, well-dressed, clean, healthy looking young man, whose clear bright eye and expressive countenance indicated attention to the natural laws of health instead of 'personal debasement.' He added: 'You may publish my name, and Dr Buchanan is welcome to visit me whenever he pleases.'"

At Combe's request Mr Charles Don, when he returned to Glasgow, endeavoured to discover the 151 infidels, but he and a number of working men, who formed themselves into a committee of inquiry, were unable to gain any information on the subject, and Dr Buchanan refused to aid them. This incident had the effect of determining Combe to persevere with his work on "Religion and Science," which would form a complete answer to Dr Buchanan's charge that the profligacy of his parish was in a measure due to the "Constitution of Man." One fact indicated much progress in the cause of secular education: a number of clergymen had acknowledged that it did not mean irreligious education, but only a distinction of time and teachers for the different subjects; several agreed to co-operate in the national school movement; and the Rev. Alexander Duncanson, a congregationalist minister at Falkirk, boldly preached the principles of the "Constitution," and recommended the study of the natural laws to his people.

A great demonstration of the National School Association was arranged to take place in the Corn Exchange, Manchester, on the 1st December, and here Combe made what was practically his last public speech. About fifteen years before he had spoken from the same platform, and the subject had been then as now education. "Since that time," he said, "I have seen a variety of countries, and have attended to the state of education in them all. I have been in the United States of America; I have seen education in Holland, in Germany, in Switzerland; and the state of the education of the

people in Great Britain is a disgrace to our civilization, compared with the provisions which are made for it in those other countries." Mr Cobden, Mr Milner Gibson, and Mr Simpson also spoke; the hall was crowded with an eager and enthusiastic audience, and the proceedings lasted from seven o'clock until midnight. The scene delighted him; the addresses in matter, manner, and reception were the best he had ever listened to; he felt that the day of triumph was near; the work was in fitting hands, and so, full of happy thoughts and faith in the future, his career as a public speaker was closed.

He returned to Edinburgh on the following day, and was obliged to keep his bed on account of a severe cold and the exhaustion produced by the exertions and excitement attending his journey to Manchester. But he was so eager to spread the news of the success of the gathering that he at once employed the willing hand of Robert Cox to write a long description, at his dictation, to Mr Lombe. His health was becoming every year more uncertain, the attacks of illness more frequent, and the period of prostration which followed them was longer after each attack. But his pen was still potent for good, and his interest in the struggle for free education undiminished. Partly for the purpose of consulting Sir James Clark and Dr Abram Cox, he now went to London every year; in 1851 he went twice on account of the Exhibition, which he believed was to exercise all the civilising influence its chief promoter expected. He had met his friend Mr Ellis personally for the first time in September 1849, and n subsequent visits to the metropolis he generally contrived to spend a few days with him at Champion Hill. The Birkbeck Schools, and other schools established on the same principles, formed an especial attraction for him, and he spent much time in them, observing the method of teaching, and noting with satisfaction the clear comprehension of economical science displayed by the pupils of Mr Ellis. Combe believed

that the grand secret of efficient education was to bring the young mind into direct communication with the objects and agencies of the world, and here he saw that idea in practice. The result was apparent in the acquirements of the scholars; and so impressed was he with the power obtained over children's minds by teaching them natural realities, that he recommended all teachers to spend a month at least in the Birkbeck Schools before commencing their career as instructors.

The soundness and value of Combe's educational views, and of his judgment as to the kind of education adapted to children of different temperaments, found large appreciation even amongst those who dissented from the phrenological principles on which he founded all his counsel. Amongst others who consulted him regarding the education of their children were the Duchess of Sutherland, Mr and Mrs Cobden, Lady John Russell, and Lady Romilly. It has been mentioned that on the same subject he had a number of interviews with Prince Albert and Baron Stockmar; and in 1850 he had an opportunity, at Buckingham Palace, of explaining to Her Majesty the Queen his theories of education, based on the physiological development of the royal children. Her Majesty was less inclined towards his theories than the Prince and the Baron, but his observations and the various reports which he prepared by Her Majesty's command were treated with consideration. He had consultations with the tutors of the Princes, and he was most anxious to induce them to study physiology, in order that they might be qualified to carry out the system of education which he was convinced would be most advantageous to their Royal Highnesses. Dr Ernest Becker, a young German and a friend of Liebig, who was appointed German secretary to Prince Albert, and to take charge of the Prince of Wales in his hours of recreation, spent three months in Edinburgh in the winter of 1850–51, and studied Phrenology under George Combe; Physiology

under the guidance of Sir James Coxe; and the English language under Mr W. M. Williams. The esteem with which Prince Albert regarded Combe was evinced in the following autograph letter, and in the gifts which accompanied it:—

"My dear Mr Combe, you have been several times so good as to give me a portrait of the *phrenological* conformation of our children; I take the liberty to-day of sending you Winterhalter's view of their physiognomies. May you, in looking on them sometimes, remember that their parents are very sensible of the kind interest you have taken in their welfare.

"I likewise send you an illustrated catalogue of the Exhibition, knowing that you have taken a lively interest in that child of mine also. We have attempted to give the work as much as possible a scientific character; the shortness of time allowed for the completion has, however, been a great drawback.

"You will be pleased to hear that the importance of science to all industries and commercial pursuits is beginning to make itself strongly and generally felt, and may be soon publicly recognised by the establishment of institutions for its connection with those pursuits. Hoping that you are quite well, believe me always yours truly, ALBERT.

"WINDSOR CASTLE, *October* 29, 1851."

Except to the members of his own family and to a very few most intimate friends, Combe never mentioned these marks of consideration on the part of Prince Albert. He was deeply gratified by them, and throughout his life he took a sincere interest in the progress of the royal children. For the Prince of Wales he entertained feelings of loyal affection, of which there are repeated indications in his journals. A few months before his death he wrote:—"The Queen and Prince Consort have risen far above the prejudices of the age in the education of their family, and in a far distant day their merits in this, as in many other particulars, will be appreciated far more highly than now."

During this period he was the object of the attention of almost every advanced thinker; books and pamphlets on

philosophical, political, educational, scientific, and theological subjects poured in upon him from all quarters, far beyond his powers and time to read. In addition, he was continually asked for advice by parents as to the professions or trades for which their sons were best adapted; in many cases the young men themselves sought his counsel, and it is surprising how many of these applications he succeeded in answering, not in mere notes of acknowledgment, but in long earnest letters of practical suggestion and direction. He was consulted, too, about cases of insanity, and frequently on matters which lay entirely in the province of a medical man. There was another class of correspondents for whom he entertained much sympathy, and who gave him a great deal of trouble. They belonged to all ranks, from the artisan to the peer, and were of both sexes. They were those whose speculations had led them into the stormy sea of doubt as to the existence of God. He had no doubts. Although for ten years now he had ceased to attend church in Scotland, he was profoundly religious, and was as deeply pained by what he called "the wickedness of unbelief," as by the bigotry and perversity of those who denounced him as an infidel, and his teaching as that of the devil. "Doubts as to the existence of a supreme intelligence," he said, "arise from some deficiency of the higher organs of mind." To one esteemed friend whose views on this subject differed widely from his own, he gave this explanation of his creed:—

"I have an excellent, valuable, and attached friend, of great talents and attainments, who does not see evidence in nature of the existence of a God; and although to my vision this existence is as clearly indicated in nature as my own being is by my own consciousness, he and I agree to differ on this point, while on most others we agree. To *his* mind the perception of design does not necessarily suggest a designer, while to mine it does so. When I comprehend the structure and uses of the eye, so artificially made, and the nature of the sun, I see the one adapted to the other as skilfully as a key is to a lock, and yet they are 90 millions of miles apart;

this suggests to my mind that there must have been intelligence at work when they were formed and adapted to each other, and that that intelligence must have been able to grasp both at the same time. This intelligence I call God, but I cannot tell in what place it dwells, in what form, colour, and size it exists. All this is hidden behind a veil in nature, but of the fact that it *does* exist, and, judging from other natural phenomena, that it is *moral*, I am incapable of doubting. Such is my creed, but I do not force it on you or any one."

The expression of this calm, steadfast faith, which underlay all his philosophy, was the answer he gave to those who doubted.

The health of Mrs Combe was a source of much anxiety to him at this time. At intervals for the last few years she had suffered from rheumatism and nervous depression. German baths and change of scene relieved her for a time, but the malady soon returned, and affected him as much as his own failing strength. For himself he was now looking to the Dean Cemetery as within hail, but he desired to bid adieu to the world in the midst of cheerful surroundings, and so in the autumn of 1851 he had the house in Melville Street newly decorated and partly refurnished, and he was as particular in attending to the details as if he had been a youth preparing a home for his bride. At the close of this year an unexpected honour was paid to him by strangers. Professor Byrd Powell, Tenessee, intimated to him that the degree of LL.D. had been unanimously conferred on him by the Memphis Institute. He respected this as a token of the service he had done.

## CHAPTER IX.

1852–1854—CHURCH EXTENSION AND SECULAR EDUCATION—LETTER TO THE DUKE OF ARGYLL—POSITION OF THE SECULAR EDUCATION PARTY—LORD MELGUND—POLITICS IN EDINBURGH—JEREMY BENTHAM—LORD ASHBURTON—LORD GRANVILLE—STATE OF COMBE'S HEALTH—SIR JAMES CLARK—THE WELSH PEOPLE AND SCHOOLS—"INQUIRY INTO NATURAL RELIGION"—MISS EVANS—MRS JAMESON—LETTER ON EDUCATION TO RICHARD COBDEN—SUPERNATURAL DOCTRINES AND NATURAL AGENCY—MASTERS AND WORKMEN—THE CHOLERA AND PALMERSTON—PALMERSTON AND THE NATURAL LAWS—PHRENOLOGY—CRIMINAL LEGISLATION AND PRISON DISCIPLINE—DEFENCE OF PRINCE ALBERT—PARIS AND LOUIS NAPOLEON—PERSONAL REFLEXIONS—THE PREPARTION FOR DEATH.

A MEETING of the friends of the Church of Scotland Endowment Scheme was held in Glasgow on the 8th January 1852, and it was proposed to remedy the evils of demoralization among the lower classes of the city by erecting more churches. The Duke of Argyll delivered an address in support of the proposal, and, in the course of his remarks, he assailed the arguments contained in Combe's lecture "On the Comparative Influences of the Natural Sciences and the Shorter Catechism on the Civilization of Scotland." To this Combe published a reply in the form of a letter to the Duke, dated 21st January. After thanking his Grace for the courteous spirit of his remarks, Combe again explained the position of the secular education party; he iterated the fact that they were not opposed to religious teaching, but simply desired to render all public schools acceptable to all sects. The reason why they desired to do this was, "Because the order of God's secular providence is the same for Jew and Gentile, Roman Catholic and Pro-

testant, believer and unbeliever. The sun shines on them alike, ripens their corn by the same process, warms them by the same influence, and its retreat to the distant regions of the South leaves them all alike enveloped in winter's desolation. The atmosphere carries health or sickness, the storm destruction, and the fire warmth or torture to all alike, according as they expose themselves, wisely or unwisely to the action of the elements. The laws of social well-being which determine the production and distribution of wealth, the destitution of some and the riches of others, are the same to all; and secular instruction means the communication of knowledge of these and other natural things and agencies." He agreed with the Duke in lamenting the condition of the lower classes in Glasgow and other large towns; but instead of attempting to combat the evils by endowing more churches, he urged that they should establish more and improved schools, separating the secular from the doctrinal instruction, in order that both might be more effectually taught. He called attention to the successful operation of the Birkbeck Schools in London, the Williams School in Edinburgh, and the Secular School in Glasgow as practical demonstrations of the kind of education he advocated, and of the willingness of the working classes to profit by it. The Glasgow Education Association circulated 2000 copies of this letter, and large numbers were also distributed in Edinburgh. The Duke was not converted, but the passage of argument was so far friendly that he shortly afterwards visited the Phrenological Museum, where Combe expounded to him the leading principles of Phrenology. They met again at dinner at Sir James Coxe's, where, with Sir John M'Neill and others, they discussed some of the points of difference between them; and the Duchess of Argyll brought her two eldest sons—the Marquis of Lorne and Lord Archibald Campbell—to Combe, in order to obtain an account of their phrenological developments. In the *North British Review* for May there appeared an article in refutation of the "Constitution

of Man," which was ascribed to the Duke of Argyll. The reviewer discussed the claims of Phrenology as the true science of mind, and decided against them. Combe did not answer the article, for he believed it could not influence any man who understood the subject.

The contest between the advocates of a system of national education based on the Catechism and the Confession of Faith, and those who sought to establish a national system of unsectarian education, was carried on vigorously and earnestly by both parties. The mass of the people in England and Scotland were apathetic, because ignorant; but they were roused to sign petitions for both parties; deputations waited on Lord John Russell and Lord Granville; bills were drawn up and thrown aside, but only to make way for the same proposals to be renewed in a slightly different form; and the government of the day found it difficult to arrive at a conclusion as to what measure would be most satisfactory to the people and most beneficial for them. The "Manifesto" party in Edinburgh had prepared a bill, which was supported by the majority of the Scottish clergy, and appeared to have a fair prospect of being passed. Against this measure Combe made strenuous exertions, and he was in a different position now from the one he occupied when he wrote to Mr Ellis that he had no coadjutors. Many clergymen had come to understand that he was not proposing an irreligious education; Lord Dunfermline had expressed his readiness to give his support to the unsectarian system; and Lord Melgund, although defeated in his first effort, was actively engaged with Combe in organising opposition to the "Manifesto" party, and was ready to bring in his own bill again, or to give his support to any similar measure which the Government might offer. The following letter to him explains the position in which Combe stood:—

"EDINBURGH, 15*th March* 1852.

"Dear Lord Melgund,—I have received letters from the Rev. Dr M'Kerrow and the Rev. Mr Baynes of Nottingham,

agreeing to take the platform here with men of every persuasion in favour of a purely secular system of national education, but their other engagements will prevent their appearing before the middle of April. On Tuesday I met the Rev. Henry Renton, Kelso, at Lord Dunfermline's. Mr Renton repeated his readiness to appear with these gentlemen, and he hopes to induce a dozen of United Presbyterian ministers to go with him. Lord Dunfermline thinks that your lordship's best course of action will be to abstain from introducing a bill this session, and try to rally as many members as possible in opposition to the ministerial scheme, in the hope that, after defeating it, they may unite in something better. Mr Renton came to me yesterday, when I put him fully and fairly in possession of all that I knew about the education question, and its different sections of promoters and opponents; and especially told him honestly that there were many more persons disposed to take the same view of the question that I do than the religious opponents believed; and that, although they might not have the power to carry a scheme of their own, they could prevent a sectarian one from being adopted. He was much interested by the details which I gave him, and which were new to him; and at the end of a three hours' conference he said that not only did he not object to co-operate with me, but he was convinced that by a little effort an association might be formed on the purely secular principle, which would act powerfully on the public mind; and that if funds could be found he and half a dozen more would visit every town in Scotland having 3000 inhabitants and upwards, to rouse the people in favour of the secular scheme. He proposed to try to form such an association in the second week in May, when the members of the United Presbyterian Synod will meet in Edinburgh. On comparing his experience in addressing the people on the purely secular scheme with that of Mr Simpson and myself, he has no doubt of the triumphant success of such an agitation as he proposes.

"We ventured to differ from Lord Dunfermline in regard to the introduction of a bill for Scotland, if the present Parliament shall last till autumn. We consider that union in mere opposition is union on a negative, which leaves positive principles undetermined and unadvanced, and therefore leads to nothing; whereas the discussion on your Lordship's bill would force principle into the arena, and lead to advance in thinking, although it might fail in reaching a partial result at present."

Mr Renton went to London at the head of a deputation, and

strenuously opposed the sectarian scheme which had been fostered by the "Manifesto" party. He was supported by the influence of the Minto family, and his own position as a clergyman made it clear to those in power that the secular movement was not the outcome of infidelity, as it had been represented to be in the face of reiterated explanations of its objects, and of the practical demonstration of its aims in the conduct of the existing secular schools.

In the midst of these discussions, and as part of the work in furtherance of the cause, Combe wrote an article on Mr Ellis's educational works for the July number of the *Westminster Review.* Writing to Dr John Chapman, the editor, in explanation of what he proposed to do, he reveals some of the conditions under which he worked.

"My present intention is to preface the notice of the book by a brief statement on three points—1st, The necessity for educating the people, for, strange to say, there are many most respectable Tories and religious persons of both sexes who do not yet see the necessity. 2d, What should the people be taught? And 3d, Who should teach them?—*i.e.*, should they be taught by lay teachers supported by rates, or by volunteer religionists as at present? It is not my forte to write upon other men's ideas, and I therefore do not promise to follow any plan you may lay down, if you disapprove of this, for my thoughts run strongly in their own channel, and cannot easily be turned aside, and always lose in vigour and vivacity when interrupted. Still I should like to have your ideas stated in simple propositions like the foregoing, that I may know them, and I shall give effect to them so far as I can."

Dr Chapman's only suggestion was that he should include a few other works besides Mr Ellis's in his review, and this was accordingly done.

Although not in robust health at this time, Combe was in good spirits. Writing to Mr Boardman, New York, and expressing a hope that he would visit Edinburgh, he said—"The resuming of dividends by the Philadelphia, Wilmington, and Baltimore Railroad, although only 3½ per cent. per annum,

has had the effect of placing us in easy circumstances after seven or eight years of forced economy, and we find the difference a great comfort as our years advance. We are not what would be called rich in this country, but our habits are simple, and we have the elegancies as well as the comforts of middle life. We should like to give you a taste of our social condition as a practical commentary on our philosophy." In this pleasant frame of mind, on the 18th May 1852, he says:—"Cecy and I set out this morning in excellent health (thank God) for London, and arrived at Sir James Clark's, 22 Brook Street, at half-past 10 P.M." One of the objects of this journey was to find a candidate for the representation of Edinburgh in Parliament in the Whig interest. But this was difficult, because—

"An ultra-liberal party has sprung up in favour of a large extension of the suffrage, triennial parliaments, and vote by ballot, but cemented together by the most narrow fanatical spirit in religion. Combined they turned out Macaulay, and combined they could return two members against both Whigs and Tories. They require the candidates to pledge themselves, not only in favour of the above three points, but to vote against the grant to Maynooth College. This party consists of two sections,—Voluntaries, who object to all endowments for religion, and Free Churchmen who object to Maynooth, because it is religious error, and patronise endowment of 'the truth,' in other words, of themselves, if they could get endowments. But every statesman knows that it would be gross injustice to repeal the small grant of £26,000 per annum to Maynooth, and that such an act would render Ireland ungovernable; and no man of character has yet been found to submit to all these pledges, although half-a-dozen have been applied to. So inveterate is the fanaticism, that on its being urged that a parliamentary inquiry is about to be made into Maynooth, and that they should suspend their decision till the result be known, they answered—'Maynooth is a sin, and there can be no such thing as a rightly administered sin.'"

With Sir William Gibson Craig, he applied to Colonel Romilly and others to stand for Edinburgh, but without success. Maynooth and the general bigotry of the population constituted obstacles which no persuasion could overcome.

On the 30th May, he, by appointment, waited on Prince Albert, and after some conversation on educational matters, he was informed of a curious circumstance, which he recorded in his journal.

"The Prince then mentioned that a gentleman had lately applied to him for leave to dedicate a scientific treatise on naval architecture to him (translated, I think, he said), because 'it would be the first in the English language.' 'Impossible,' said the Prince. 'Nevertheless true.' The Prince was incredulous, and sent a note to the Admiralty begging them to send him the best treatise on naval architecture. The answer came—'No such book exists in the English language.' He became curious to learn by what rule they built their ships. They had measurements which were practically known, but in forming the curves on which the ship's sailing powers depend, they were guided wholly by the eye and the hand! 'How by the hand?' 'You may well ask that question.' The Prince then placed the palm of his hand on the window shutter, drew it carefully along, and said—'that's the way they do. They actually feel the curve by passing the hand in that way over the planks as they are placed on the skeleton ribs, and they raise or depress, extend or contract them according to their estimate of the approach to an ideal model existing in the operator's head!' I expressed surprise. 'Yes,' said the Prince, 'the English boast of being a practical people, but was there ever such an example of it as this?' The safety, glory, riches of the country depend on their success in shipbuilding, and their knowledge of the art is wholly practical. No wonder that they spoil many vessels.'"

The following extracts from Combe's journal illustrate the social phase of this sojourn in the metropolis:—

"3*d June*, 1852.—Dr Neill Arnott [the inventor of improved fire grates and other heating apparatus] dined with us to-day. He mentioned that Jeremy Bentham had an old female servant whom he had taught to speak in his own style. Dr Arnott called one day on Bentham, and asked if he was at home. 'He is circumambulating, sir!' was the answer. 'Oh, I'll go to him and circumambulate with him.' He was shown into the garden round which Jeremy was walking. He called on another day which happened to be wet. 'Is Mr Bentham at home?' Yes, sir, but he is gyrating.' 'I'll go in and talk

with him while he is gyrating.' He was shown into the library, where Jeremy was sitting in a rocking chair close to a pillar, and keeping himself rocking by pushing his feet against it. If Dr Arnott had not used these words, the old woman would have thought him no philosopher, and unworthy of her master's society.

"*4th June.*—I dined with Lord Ashburton, and met Lords Lansdowne and Granville, the latter the successor of Lord Palmerston as foreign secretary. Sir James Clark and six other persons made up the party. Lord Lansdowne recognised me as his acquaintance at Ischl, but soon left to go to the Queen's concert. He was dressed as a Knight of the Garter, and looked well. Lady Ashburton is a large woman, fair, nervous lymphatic, with a large head and big anterior lobe. She is said to be a clever woman, uneducated beyond fashionable accomplishments. She retailed a new sarcasm against Mr Cobden. Some one has called him 'the inspired Bagman, who believes in a cotton millennium.' This was greatly enjoyed by the company, who seemed to dislike Cobden. The aristocratic circles, I am told, seek to hide their essential ignorance and selfishness in a perpetual persiflage and detraction. Thomas Carlyle and his wife came after dinner. They both affirmed that they had met me at Dr Neill's in Edinburgh twenty-five years ago, but I could not remember them. I saw them only for a moment before going away. His forehead has large knowing organs, with Eventuality and Comparison large, but Causality not so big; I could not see it well, however, on account of the hair and the rapid glance allowed me. His temperament is high nervous bilious. Lord Ashburton is dark, nervous bilious, towards fifty apparently; the knowing organs and Comparison predominate. His manner is very pleasing. Lord Granville is nervous lymphatic, and has a well-developed average anterior lobe. I could not see the rest of the head in either owing to thick hair. He also is pleasing in his manner. In the drawing-room they took seats opposite me, and talked upwards of an hour on Phrenology and education. Both knew enough to put relevant questions, and make serious and judicious remarks, and we embraced a large number of topics. Lord Ashburton said that he was anxious to improve the schools on his estates, and would probably send some teachers to study at the Birkbeck School. Lord Granville said that the further he proceeded in Phrenology the more interesting it became."

Combe had, in the course of years, gradually ceased to make

detailed phrenological estimates of the distinguished men whom he met, and confined himself to a simple general observation of their temperaments and most marked organs, as in the foregoing passages. Latterly, indeed, he merely records names, unless when some subject of conversation especially attracted his attention. Amongst intimate friends his phrenological opinion of particular persons was frequently desired; but he shrank from any approach to levity in speaking of the science; and those who made inquiries from mere curiosity were dismissed ungratified, if not with a grave reprimand.

On leaving Sir James Clark's, Combe went to his nephew, Dr Abram Cox, at Kingston. On examining his chest with the stethoscope, Dr Cox found sub-inflamation of the left lung with congestion. No pain or outward symptoms, except those of an ordinary cold, had indicated the presence of the disease, and he had intended to go to Mr Ellis's on the day he was ordered to bed. Sir James Clark visited him immediately on learning that he was ill, and gave him the consolatory information, that except the congested lung, he was in a sound condition. In obedience to the directions of Sir James Clark, Dr A. Cox, and Sir James Coxe, the plans of the Combes were entirely altered, and instead of going to the Continent, they arranged to spend a couple of months travelling leisurely in the south of England, and making occasional visits to London, in order that Combe's medical advisers might observe the progress his lung was making in the process of absorption. They accordingly paid a visit to Mr T. H. Bastard, at Charlton, Dorsetshire; and in August they journeyed through Wales, accompanied by Mr Ellis's family. Referring to the scenery of Wales, Combe disposes of it with an honesty which, if generally observed, would considerably reduce the bulk of many books of travels; he says, "for details see the guide-book." But here, as everywhere, he entered the schools and studied the condition of the people.

"The Welsh are the best race of Celts I have seen. They have books in Welsh, and a great many dissenting chapels, maintained by themselves, in which Welsh is preached. There are schools also mainly supported by themselves, under the patronage of the National, or British and Foreign School Societies. They are industrious, and do not appear in squalid poverty. Still there are strong marks of their Celtic character. They are dirty, *i.e.*, the children have unwashed feet, faces, and hands; their clothes are in general dirty although not ragged; the cottages and humbler houses for tradesmen, shopkeepers, and small farmers are destitute of all beauty or taste in form and proportion, exactly like the same edifices in Celtic Scotland—stone and lime put together without an idea of pleasing proportions. They have dry stone walls where hedges would thrive; the harvest is half finished, and we see the most slovenly fields, the grain and potatoes choked by weeds, the reaping performed in the most tawdry manner, the sheaves ill-formed and ill-bound. There is scarcely an attempt at 'stooks,' and the stacks are without form or comeliness. Our clothes given out to wash are returned dirtied rather than cleaned, and as to the dressing of them, it is wretchedly done. Their brains have the Celtic narrowness in the anterior lower region, and Ideality is deficient. But the population is much mixed, and one sees many finely organised, and some very pretty auburn-haired children with blue eyes, whose brains are of Saxon forms."

His experience of the school at the village of Beddgelert affords a fair example of all the others.

"We visited the British and Foreign Society's School taught by Mr Thomas Morris, a man of thirty or so, with a large head, large broad anterior lobe, but considerable propensities. His manner to the children was mild; but they were an inferior set; a few had well-formed brains, a few very defective, and the majority large animal organs, large Self-Esteem and Love of Approbation, with moderate moral and intellectual organs. They are the children of miners, and slate quarrymen, and agricultural tenants and labourers. In their attire (many were barefooted) and dirty faces, they indicated neglect. About eighty are in attendance. They do not know a word of English except what is taught in the school, and they seem to learn little there. The New Testament is the only book they use that has both languages; their other school-books are those patronised by the Society and the Irish National Commis-

sioners, very good in themselves ; but after hearing the highest class read a very few simple sentences, I tried how much they understood, and was speedily arrested by discovering that they did not understand my questions. The teacher translated them into Welsh, and they answered in Welsh, and then found a few English words, showing that they were not ignorant but embarrassed by the, to them, foreign language. The school was built and opened only eighteen months ago, and some of the best scholars were absent. Not twenty of them hear English spoken anywhere. They have a few maps, but no objects and no pictures. The teacher made the class repeat a lesson in English grammar, which they did fluently enough; but on asking them to give an application of the definite and indefinite articles, which they had technically described, the idea was so new to them, that they stared and were silent. Such is the result of the voluntary system in education ! The difficulties which these poor teachers have to contend with are very great, and they are inadequately assisted. The clergyman here is a Puseyite, and takes no charge of the school, and the proprietors seem to leave it unheeded after having assisted in building it. The teacher's salary, including all emoluments, is £40 per annum."

The Combes travelled from Shrewsbury to Coventry where they spent a few pleasant days with Mr Charles Bray, whose hospitality they enjoyed on several occasions and at whose house they first met Miss Evans, (now Mrs G. H. Lewes, and distinguished as "George Eliot" in literature). Mr Bray, a ribbon manufacturer, and the proprietor of the *Coventry Herald,* took an active interest in educational matters and in the advancement of liberal principles. He was in Coventry what Combe was in Edinburgh, the stedfast advocate of unsectarian education and the opponent of bigotry. From Coventry the Combes proceeded to London. Dr A. Cox and Sir James Coxe again examined Combe's chest, and reported that little progress had been made in the process of absorption, but as the greater part of the left lung and the whole of the right one were sound, the disease might remain dormant and life go on for years with only a slight diminution of strength. He had been feeling comparatively so well that he had hoped for a

better report; but the disease caused him little discomfort; he was thankful for so many enjoyments, and he returned to Edinburgh resigned, and resolved to make the most of the time which might remain to him.

He reached home on the 22d September, and his first thoughts were of his work on Natural Religion. The task he had set himself was in his eyes the most important which man could attempt. He approached it with anxiety and a deep sense of the responsibility attached to it, but also with the conviction that the world would be helped forward in happiness by what he had to say. The basis of the work had been laid down in the three pamphlets, "National Education," "The Relation between Religion and Science," and "What should Secular Education Embrace?" But there was still much to do in formulating the principles into one complete work. There was also much in what he had to say which would startle and even shock friends whom he esteemed, as well as much that, to many wise and earnest minds, would appear dangerous to the welfare of mankind. Conscious of the misapprehensions which would certainly attend the interpretation of the work, he sometimes hesitated, and doubted if the day had yet come when it should be put forth.

"I have often misgivings about my intended work on Natural Religion, and think that men will elaborate in due season all that I could tell them, and more truly and effectually than I can do, when they are prepared for it, and that until then it will have little effect. Again, I think it is a duty to record all the truth that I know and believe to be useful, and to throw it out for consideration, leaving its effects to its native force. The 'Constitution of Man' and my other writings have certainly tended to advance the views of some men who are influential for good; and apparently had I not published them the same ideas would not yet have appeared in the same form. It is a higher principle to do what seems right and to leave the consequences to God's Providence, than

to shrink from labour and trust to some one else doing the work. I shall do my best, therefore, to expound the subject; so help me God."

Grave as his cast of thought generally was, it was rendered still more grave by his present condition. Sir James Clark's watchful anxiety over his friend's health was as remarkable as the energy he displayed in finding so many opportunities of seeing him, and in maintaining a frequent correspondence with him on many subjects, despite the heavy demands upon his time and strength made by his attendance on the Royal Family and private practice. He made a point, during these latter years, of always seeing Combe for an hour or two when the Court rested at Holyrood on the way from Balmoral to the south. Instead of dining at the Palace Sir James would send a note telling Combe to have a chop ready for him, and thus obtained an extra hour to devote to his friend. When he saw him in this October (1852) he gave Combe the agreeable tidings that his lung was convalescent. The information elicited this reflexion :—

"Some persons call for a personal God, who shall listen to their prayers and relieve them individually, and say that by the natural laws God cares not for the individual. How different is my feeling. In the constitution which He has given to the lungs, He has provided for my individual restoration, and apparently the process is now going on, even on the very verge of 65. Surely this is a far nobler way of providing for my welfare, far more consonant to all rational and elevated notions of a great moral and intelligent Ruler, than the method of my calling on Him for aid, and His conferring it as a special favour in consequence of my urgency and faith! I recognise His power, goodness, and design as forcibly as if He appeared personally."

All this applied to the work he had in hand. "One use of the near aspect of the grave which I have had," he wrote to Horace Mann, "has been to stimulate me to print for the *private consideration of my friends*, some views of natural religion which have long been floating in my mind. They

will be all in type, if my present state of health continues, by April next, and I shall send you a copy. They will disappoint you, for I find the subject enormously difficult, and I have delayed the task too long. I have not cerebral vigour to do justice to it. Nevertheless, I shall point out how abler minds should go to work to reach truth."

Whilst he was working steadily at this book, he was also taking part in domestic enjoyments, and in entertaining occasional guests. Miss Evans spent a fortnight in Melville Street, and Combe was as much delighted by her powers as a musician as he was amazed and interested by her acquirements as a linguist (including Greek, Latin, Hebrew, German, French, and Italian) and her profound knowledge of the different schools of philosophy, combined with a thoroughly feminine and refined nature. She was at this time assisting Dr Chapman in editing the *Westminster Review*, and until she ceased to be connected with it early in 1854, she had frequent occasion to correspond with Combe, and always wrote with a pleasant recollection of the days she had spent in Edinburgh. Mrs Jameson, the author of the "Legends of the Madonna," was another guest who brightened his hours of relaxation and with whom he could discuss the serious subjects which occupied his thoughts. Amongst these the education question was still prominent.

He had counted much upon Cobden's influence in carrying a suitable measure, and was somewhat disappointed by the receipt of a letter from him taking a desponding view of the prospects of the system he advocated. His reply explains all that he wished and hoped to attain.

"EDINBURGH, 11*th October*, 1852.

"My Dear Sir,—I duly received your letter of the 4th September, on the subject of National Education, and read it with great interest; but mingled with feelings of regret at the unfavourable view you take of its prospects of success. The object aimed at is so important, and your position in relation to it so influential, that I hope you will forgive me

now when quietly settled at home, for again bringing it under your consideration.

"You are right in saying that our chief difference lies in the question as to what is practicable. I admit your superior opportunities of judging on this point; and if the ensuing session of Parliament, or any other session within your lifetime, were *finally and irrevocably* to decide the matter, I should surrender in despair. But *you* have given the world the most illustrious proof in recent times that a sound principle is capable of being realised in practice, and, moreover, that when urged with adequate zeal and ability, it is irresistible. In a nation's progress, a few years are of subordinate importance; but if ever a great end is to be achieved, the efforts to accomplish it must have a beginning and a middle before they can have an end. You say that I appear 'to have confounded two things quite distinct, whether a system of National Education can be carried out in our day in this country, and what kind of education it shall be.' You add, 'a State Education may fail quite as much as a private system, in these essentials of usefulness which you (I) have pointed out,' and you refer to my account of the schools in America as evidence of this failure. Allow me to assure you that I clearly see the distinction you here point out; and I subscribe to the possible, nay, probable *temporary* failure of a national scheme; but my urgency for efforts to realize an organized system remains unabated. In the voluntary system of education, the leading object is *not* to teach things that may conduce to the temporal well-being of the scholars. The practical men who pursue this world's wealth for their own sakes, are, with a few honourable exceptions, not great educators. They want cheap labour, and that degree of intelligence which shall enable the child to learn to practice some small department of skilled or unskilled labour with success. They will educate to this extent, but no farther. The religious men, again, have the church or chapel constantly in view as their grand object. They desire to teach first the doctrines that may bind the conscience of the child to their own altar, and they will add only such secular knowledge as, in their opinion, may be useful and compatible with this end. But what is wanted is an education of the people as moral and intelligent, as well as labouring and religious beings: an education which shall aim at enabling them to deliver themselves by progressive steps, and in successive generations, from the filth and degradation, physical and moral, and the stolid ignorance and imbecility in which the

majority of them now exist; and at elevating them into the condition of moral and intelligent judges of the natural causes of their own happiness or misery, and at infusing into them mental vigour sufficient to reach and maintain themselves in a state of well-being by a cheerful and habitual compliance with the requirements of these causes. To realize such a scheme of education, the sectarian educator must be set aside; the worldly minded accumulator of wealth must be enlightened and humanized, and the people must be roused to perceive the advantages, and urgently to desire the practical introduction of it. This is a gigantic task, but so was it a Herculean labour to abolish slavery, to emancipate the Roman Catholics, to procure Parliamentary Reform, and lastly Free Trade. But there were giants in philanthropy and in intellectual acquirements in those days triumphantly to perform these glorious achievements, and there are still, I sincerely trust, great spirits walking this earth able and willing to do as much for the education of the people.

"I acknowledge that water can never, by its own motion, rise higher than its fountain head, and neither can education, by whatever machinery imparted, go beyond the intelligence of the educators. But it is possible to construct a water-course which shall waste the water, obstruct its flow, and prevent it from ever rising to the level of its source. So it is with education. Place it in the hands of men whose chief object is not to promote the temporal well-being of the people, but to attach them to a creed, and you throw obstructions in the path of the philanthrophy and intelligence which would devote themselves to this end. The scheme which I desire to see recommended to Parliament and the people is one which should simply form the inhabitants of a social district into a corporation, with power to tax themselves to erect and maintain a school for instruction in the conditions of social well-being. I should have no objection to add power to raise a rate for religious teaching, provided that no man should be bound to pay it who did not approve of the religion taught by means of it. This simple machinery, would, in time, change the character of our schools. In the first place, the highest lay intelligence could act with effect on the system to be pursued in the school, by appearing on the platform and advocating his own advanced views, which he would have a *right* as being subject to the tax, to do; whereas at present this intelligence is sedulously excluded from influence over the schools of a religious origin. Mr William Ellis has offered to give instruction in the conditions of social well-being in several schools

supported by the subscriptions of religious persons, and generally they have declined to admit him. I am *ex officio* a trustee of John Watson's educational institution here; twelve managers are chosen annually from about 100 trustees, who are entrusted with the practical management of the institution, and I have been anxiously excluded. I have been proposed, and rather than admit me, the trustees agreed, last year, to use the ballot to decide on the twelve, they having hitherto been nominated by the chairman of the institution. If the ballot falls on me I may get in. Now, were we all taxed to support schools, we could urge our views in a way which we cannot do as mere voluntary subscribers. Moreover, and in the second place, the Act of Parliament which limited the instruction to the conditions of temporal, individual, and social well-being, would give a different direction to the thoughts and aims of the religious men. Their churches and chapels being banished to the separate schools, they would exert their understandings to render the secular instruction really efficient for its end. In a very brief space of time, comparatively, they would, by the sheer necessity of their position, be forced to study the real merits of secular instruction, and having discovered these, they would act on them. This takes place in America. Men like Horace Mann, Dr Howe, and Henry Barnard have an influence there which no individual can wield in this country, unless avowedly sectarian, and then he can act only on his own sect, and under the trammels of his creed. The general ignorance of the natural conditions of well-being which still prevails in the United States is the cause why instruction in this knowledge is not, to a large extent, introduced into their schools; but their laws leave the doors open for the entrance of a higher state of knowledge, and give the professors of it a *legitimate right* to urge its introduction, which is wholly wanting here. You, my respected friend, in Parliament stand in the position which Horace Mann does in America. You have a *right* to lay bare the nakedness of the existing schools, and to urge Parliament and the nation to introduce a better system. Fulfil this great mission and I am satisfied. Leave it to the people who pay to teach what they please, limiting the instruction in the secular school to the conditions of temporal well-being, and *you cannot* fail. Whatever principles lead to that end will, sooner or later, find their way into the schools, and all the sooner that there will be no rival objects to exclude them.

"One word more; you say that you 'would not prefer mixing secular and religious teaching, but I would not set out

with *prohibiting* such a union where it was desired by others.' Neither should I, if I saw any possibility, in a national scheme, of avoiding injustice and oppression of the minority in such cases. Whenever a school district is absolutely unanimous in its desire to mix them, as in your parish, by all means let this be done; only let the legislature provide that even in this case the Government Inspectors shall have a right to see that the secular instruction is not a sham, and also, that if there be dissenters they shall not be taxed to support a religion of which they disapprove.

"I regret that the liberal electors are voluntaries in education as well as in religion, but I regard them as open to conviction, and you could wield a powerful influence in bringing them to sounder views."

About a year after the foregoing letter was written, Cobden and John Bright at Manchester boldly advocated the separation of religious from secular instruction; Lord Ashburton made a speech to the same purpose, and the *Times* supported them. These influences, Combe said, had caused an advance of public opinion in Scotland, and he believed in England also, equal to seven years of ordinary discussion. But Cobden doubted if more than one per cent. of the Scottish people *demanded* a secular system, and Combe replied:—

"Substitute the word *wishes* or *desires*, and you are very wide of the mark. The Scotch are physically brave, but so cautious and so 'afraid of the folk,' that, *morally*, they are cowards until they are convinced, and then they are as brave morally as physically. Now, for centuries they have been trained in deference for the Catechism and the Bible; those who have come to see the evil of rendering them *tests* in common schools, and attempting to found secular education on them, still remember their original opinions, and how strongly they held them, and they know that many are still of their old faith. This renders them averse to *demand* a secular system,—to come forward, in short, before their unconverted brethren, to declare their new opinions, and to fight the battle with them. But if you had access to private society here you would soon be convinced that the numbers who *desire* a secular system are legion, and comprise by far the most advanced and vigorous minds in the country. The demonstrations on the other side are *organised* by the clergy, and conducted for purely clerical

purposes. This is well understood in Scotland; and also that the demonstrations have no solid foundation in reason, not even in sincere conviction on the part of the majority who assist in making them. I say this advisedly and from knowledge. We had a parallel case two years ago on the Maynooth Grant. Everywhere large public meetings were held and headed by the same men who now advocate the Catechism, and they denounced every member of Parliament who should vote for that grant. But the government stood firm, passed the grant, and the people of Scotland gave themselves no trouble about it! The same result will follow from limiting government interference to secular teaching. If you and Mr Bright will stand out for it and lead opinion, you may rely on a triumph as certain and far sooner than in the case of the corn laws."

Combe's health prevented him attending the education committee of the House of Commons to give evidence; and Lord John Russell, when unfolding his plan of national education to Parliament in April 1853, whilst he spoke with respect of Combe's proposals as deserving of the utmost consideration of the House, fell into the common mistake that he desired to exclude Christianity. This brought forth from Combe, in correspondence and in the *Scotsman*, a repetition of the explanations of his real position; and he found it necessary to iterate them as long as he lived. The phrase "Godless Education" had been applied to the system he advocated, and there continued to be a large class of people who either could not or would not see the plain distinction between instruction based upon the laws of nature with separate hours for doctrinal teaching, and instruction which should exclude religion.

"To teach supernatural doctrines as the basis of natural agency is preposterous; and to imagine that any education which does not impress on the understanding the invariable character of natural agency, and the inevitable results that follow from it, *can* prove effectual in regulating conduct in practical affairs appears equally chimerical. While the supernatural is taught in schools as the basis of the natural, the natural will never be taught at all with practical effect.

"Lord John Russell regards my ascribing divine authority

to nature as 'dangerous.' Dangerous to what? I cannot answer this question except 'to superstition.' The religious emotions exist in man, and are very powerful incentives to action. They may be directed in infancy and youth to any objects or doctrines. To say that the direction of them to respect God's natural laws is dangerous, is absurd; while to teach God's order of governing in nature *without reference to Him*, leaves that teaching unwarmed, unhallowed, and unsupported by the religious emotions, and it loses greatly in its interest and its practical influence over the youthful mind."

The Scotch Education Act of 1872, as already mentioned, carried into effect nearly all that Combe so earnestly advocated: the Church control of the schools is abolished, although the anomaly remains that the Normal Training Schools continue under the direction of the Established and the Free Churches; religion forms no part of the inspection of schools; separate hours are appointed for religious instruction, either at the opening or closing of the schools, and parents may withdraw their children from these classes without the children being placed at any disadvantage in regard to secular instruction; and no parliamentary grant is made for instruction in religious subjects. If the Normal Training Schools were likewise released from Church control, and if the study of physiology and of elementary social economy were made more prominent in the subjects of education, the system for the introduction of which Combe struggled so hard would be completed. He was throughout consistent in claiming for every individual the right to choose his own creed in religion without being visited by social penalties of any kind. For this he was handed over to perdition by both Protestants and Roman Catholics. When asked to join an association to check the progress of the Roman Catholics he peremptorily declined. "The true way," he said, "of combating both Roman Catholic and Protestant arrogance, in my opinion, is to enlighten, humanise, and liberalise all classes of the nation by improved education."

Although he did not take an active part in the public dis-

putes between masters and workmen, he had occasion to give his opinion regarding a strike of the engineers :—

"I have decided only one point against them, which, however, I see that some of them disavow, namely, that it is unjust on their part to attempt to dictate to the masters *what* men they shall employ,—unskilled labourers, for example, or apprentices, or any other sorts of men. Every one of them has a right to sell his labour, and every master has a right to purchase it, on whatever terms they can agree upon; and the combined engineers have no right to dictate to any one, although they have an undoubted title to accept or reject any terms offered directly to themselves."

The winter of 1852-53 was chiefly occupied in the preparation of "An Inquiry into Natural Religion, its Foundation, Nature, and Applications."

"*May 6th.*—This day I have finished my work on Natural Religion. God be thanked! My work is now done; the completion of this book gives me pleasure equal to that which I enjoyed in finishing the 'Constitution of Man.' I grieve at the pain it will give to many excellent persons when it is published; but I have the firmest conviction of its essential truth, and of its doing good adequate to compensate manifold this unavoidable evil. I do not contemplate its immediate publication. In Edinburgh I should be sent into social banishment were it known."

Although this banishment would have been a severe trial to him at his age, he did not fear it for himself; but Mrs Combe was much dependent on society; they had lost part of their social circle on account of the heterodox views expressed in the "Life of Dr Combe," and he did not wish to subject her to a still greater trial by the publication of this work. He took every precaution to restrict the circulation of the book to those few friends whose corrections and improvements he desired to have in order to prepare it for posthumous publication. He printed 100 copies, which were enclosed in sealed wrappers, and about fifty were distributed to his friends. The printers

were bound under a guarantee to prevent any of the proof sheets leaving their office, and to deliver to him all waste sheets with the complete copies. On the title page he intimated that the work was "not published, but confidentially communicated by the author," and in a preface* he desired his friends to regard it as a strictly private communication. All these precautions did not mean that he had arrived at any conclusions of an impious character, or different from the views which he was known to hold. But in this treatise he had brought into a focus all that had appeared in his other works on the subject of religion, with the addition of the results of his increased experience and reflexion, and such farther expositions as appeared to him requisite to give a connected

* The following is a copy of the preface :—"In the month of September 1852, I returned, in a precarious state of health, to pass the winter in Edinburgh ; and as the issue of the malady was doubtful, I became anxious to put on record certain views on Natural Religion, which had been gradually unfolding themselves and accumulating in my mind from youth to advanced age, and many portions of which were scattered disjointedly through my published works. These I collected, arranged, and supplemented by new and connecting observations, with the design of presenting a more intelligible outline of the subject. I started from facts in nature which appeared to me to be ascertained, and pursued the argument through its various branches to what seemed its logical results, unmoved by its deviations from established doctrines and authorities. The work was intended for posthumous publication, if ever published at all; but being unwilling to cast upon the world opinions differing so widely as mine do from the views of the age, without having them subjected to the scrutiny and criticisms of individuals competent to detect their errors, who might enable me to amend or modify them, or, if necessary, to withhold them from publication altogether, as the calls of truth might dictate, I have printed a few copies for private distribution. In presenting these to such friends as may do me the favour to peruse them, I beg to stipulate that each individual shall hold the copy presented, as communicated to him or her *personally and confidentially*, and that the work shall on no account be treated as a published book, or be lent, reported on, quoted from, criticised in print, or discussed in social circles. I shall be deeply grateful to those friends who may agree to peruse it on these conditions, for the freest commentaries on it, addressed to myself ; and I pledge myself to hold all their communications to me as strictly confidential. To some this anxiety about restricted circulation may appear weak and unworthy; but those who know the state of religious opinion and temper in Scotland, and can appreciate the pain which the ebullitions of that temper might give to a circle of attached relatives and friends, will understand why, on their account, I shrink from an encounter with them, which I should fearlessly brave if I stood alone.—EDINBURGH, 6*th May* 1853."

view of the conclusions at which he had arrived. They were the outcome of his life's thought, and seemed to him to lay the foundation of a new religion in which God should be recognised guiding the affairs of daily life through the laws which He had established in nature, and which He had endowed man with faculties to see, understand, and obey. The issue of the work in this private manner was tentative; he found, as he had often done before, that in it he had simply given utterance and shape to the thoughts which many entertained. Several of the friends to whom he presented copies wondered that he should hesitate to publish it; and in this hesitation he was, as he admitted, influenced by local and personal considerations. The result of the communications he received, was, that four years afterwards (1857), he published the book with additional matter, and the original text remodelled, and in great part re-written, under the title of the "Relation between Science and Religion."

Meanwhile, having finished the work which was the product of so much anxious and yet delightful labour, he proceeded with Mrs Combe to London. There he was the spoksman of a deputation to Lord Granville, who was the President of the Committee of the Privy Council on Education, and explained at length the views of the advocates of secular education. Mr James Simpson was with him, and this was the last occasion on which these old friends and coadjutors acted together in behoof of the object which had formed one of the strongest bonds of union between them. On the 2d September of this year (1853) Mr Simpson died suddenly in Edinburgh of disease of the heart, at the age of 73. His services to the cause of education were recognised by the government granting a pension of £100 a-year to his two unmarried daughters.

A month was spent by Combe in London and the neighbourhood, during which he had opportunities to visit prisons and discuss their discipline with the Government Inspector of Prisons, Mr J. G. Perry; and to converse with Dr Lyon Play-

fair on secular and scientific instruction. Then on the 10th July he sailed in the *Baron Osy* for Antwerp, a pleasure which he had never expected to enjoy again. Two months were occupied in revisiting favourite places in Germany and Switzerland, and on his return to London at the end of August he made this note in his journal.

"*August* 26.—*Cool Showers.*—Cecy has returned in perfect health, and I am certainly improved in strength and in ability to sustain cold or cool air. We have enjoyed much, and I feel most grateful to the Unknown Intelligence and Goodness which called me into existence, and has prolonged my powers of enjoyment to this advanced age. Advanced it is for me, although for more robustly constituted men it would scarcely be reckoned old age. The change in my mental condition, from my vigorous days, is now very conspicuous. Formerly every feeling vibrated at the slightest touch, and from the large size of the affective organs in my brain, I was constantly labouring under anxiety and earnest desire in one form or another. Now age has blunted that activity, and I neither hope nor fear, nor desire with any intensity. A quiet tranquillity has succeeded to a state of internal agitation, and I enjoy a calm existence in each hour as it passes. Intellectually the change is equally conspicuous. In former years there was a well-spring of thought in my brain, which gave me a large internal world of interests, and excluded to a great degree the recognition of external objects and phenomena. Even in travelling I looked outwards by an effort, and was ever ready to fall back into my internal domain. This arose from the observing organs being less developed, and also much less exercised than the reflective. Now I am no longer conscious of a spontaneous flow of ideas of any value, and the external world suffices to fill my whole sensorium to its entire satisfaction. In Switzerland I sat in the carriage and gazed on the scenery with a placid pleasure; and for hours in succession no other conceptions entered or arose in my brain. In the railway cars and steamboats I

could sit for hours with entire satisfaction thinking of nothing and doing nothing, enjoying simple bodily and mental repose. This state of existence, although not a very elevated one, I find to be exceedingly enjoyable, much more so than that of the days of keen sensitiveness, ardent desire, and intellectual fervour. I suspect that my present condition approximates pretty closely to that of the great majority of mankind when in the enjoyment of good health, and not oppressed by external evils; and also to that of the lower animals when in their natural and normal circumstances. If so, they have much in life to rejoice in."

There is in this passage a degree of observation on his own condition which shows that his mental activity was still considerable, even in apparent rest. One incident occurred during a call on Dr Lyon Playfair at the Science and Art Department, Marlborough House, which gratified Combe much, and affords an indication of the many directions in which his influence was felt. An assistant of Dr Playfair, a young soldier named Corporal Mack, had asked to be presented to Combe, and, when introduced, told him that with some companions in his regiment he had formed a reading club; they had read the "Constitution of Man" aloud, and had commented on it, and it had exercised a practical influence on the habits and views of himself and comrades. From many parts of the world Combe received similar spontaneous testimony to the value of his work.

After an excursion to Belfast to see his nephew, James Combe, who was now at the head of a large engineering firm, and to visit his friends the Dunvilles, Combe returned to Edinburgh towards the end of September in a much better state of health than when he had set forth in May. His interest in public events was undiminished, and when the cholera again appeared in this country he was anxiously desirous that practical measures should be adopted to arrest its progress. The Presbytery of Edinburgh applied to Lord Palmerston to learn whether or not the Queen meant to appoint a day of

general fasting and prayer to avert the evil. His Lordship replied in a letter which exactly embodied Combe's sentiments, to the effect that a national fast would not be suitable to the circumstances of the moment. The following sentences might have been extracted from Combe's writings:—

"The Master of the universe has established certain laws of nature for the planet in which we live, and the weal or woe of mankind depends upon the observance or the neglect of these laws. . . . When man has done his utmost for his own safety, then is the time to invoke the blessing of heaven to give effect to his exertions."

The Presbytery expressed its astonishment at this letter, designated it as unchristian, and declined to enter it in their minutes. "This," said Combe, "is the counterpart of the secession clergy, who in 1743 set down the repeal of the statutes against witchcraft as a national sin! The press is condemning the Presbytery, and in society people are laughing at them."

Lord Palmerston was at this time acting in another matter which engaged Combe's sympathies—namely, in framing a new system of prison discipline. The failure of all previous efforts to reform the criminal, and the revelation of the cruelties perpetrated in the Birmingham prison,* under the mistaken idea of compelling the prisoners to perform their allotted tasks, without reference to their physical condition, had drawn public attention to the whole subject of criminal legislation. Combe entered into the discussion with his usual earnestness. His leading views on the subject have been already explained. Now, the turning point of the whole question appeared to him

* One instance, quoted by Combe in a letter to Sir James Clark:—"Governor Austin, because a lad had not strength to turn a crank 10,000 times a day, deprived him of food in order to force him to do the task, in other words, to increase his muscular power, an indispensable requisite to his performing it. The want of sleep and food diminished his power; he failed again in his task, and then he was put into a strait waistcoat and collar, and strapped to the wall until he became insensible—all in diametrical opposition to the course of nature as revealed in the human organism."

to be—"Shall the influence of the brain and the nervous system be recognised by our law makers and home secretaries as fundamental in the treatment of criminals, or shall we go on for another half-century on the spiritual hypothesis that their cranium has nothing to do with their conduct, and need not be regarded in their treatment?" In the hope of helping forward an improved system of criminal discipline, Combe wrote, in November, an article which was published in the *Westminster Review* in April 1854, and, with considerable additions, issued as a pamphlet of 105 pages in the May following, under the title of "The Principles of Criminal Legislation and the Practice of Prison Discipline Investigated." Desirous of bringing as much authority as possible in favour of his theories to bear upon our legislators, he submitted the proofs to Sir James Clark, with the request that, if he could agree with the arguments, he would sign, and induce other physicians to sign, a certificate to this effect: that the fundamental principle on which the pamphlet was based, namely, "that criminal legislation and prison discipline will never attain to a scientific, consistent, practical, and efficient character until they become based on physiology, and especially on the physiology of the brain and nervous system, was a sound principle; and, most strongly entertaining this conviction, we recommend Mr Combe's views to the consideration of all who take an interest in these momentous subjects." Sir James not only signed this certificate himself, but was indefatigable in inducing others to sign it, and it was accordingly endorsed by Sir B. C. Brodie, Sir Henry Holland, Professor Richard Owen, Sir John Forbes, Dr John Conolly, and Dr William B. Carpenter. Differing as most of these gentlemen did from Combe's particular physiological views, their combined sanction of his fundamental proposition regarding the method of dealing with criminals was of importance in securing the serious consideration of men in power to what he had to say.

In this pamphlet Combe reviewed what had been done in

the way of prison discipline; discussed the systems adopted in Millbank, Portland, Dartmoor, and Pentonville, and contrasted them with those adopted in the State Prison of New York, the Eastern Penitentiary, Philadelphia, the Rauhe Haus, near Hamburg, and in Valentia, Spain. Whilst arguing for the adoption of a system which should aim at reforming rather than punishing the criminal, he distinctly asserted that "in the treatment of each offender society has a right to employ *every degree of severity* that may be necessary to defend its own interest," *vengeance* being excluded. Mere physical penalties he denounced as useless, and proposed the substitution of a system of training which should enable the offender to understand that honesty was the most profitable policy. But he desired above all that crime should be checked at its source by the education and training of the young. The pamphlet was received with approbation by those whose experience qualified them to be the best judges of its value. Baron Alderson said it was "one of the most valuable and suggestive books on the subject I know," and he quoted from it in his charge to the grand jury at York in December 1854; Judge Conklin in America supported its conclusions, and Professor Mittermaier in Germany incorporated the substance of it in a work on Criminal Legislation which he was then preparing.

In 1853 Combe's nephew, Sir James Coxe, M.D., who had edited the works of Dr A. Combe, revised and re-wrote the anatomical portions of the fifth edition of the "System of Phrenology," in order that the work might present the results of the researches of physiologists into the structure of the brain up to that date.* There was no advance in Phrenology to notice since the publication of the fifth edition in 1843. The cause of this stationary condition of the science appeared to Combe to "arise from the circumstance that the individuals who first introduced it to the world, and also their coadjutors

* The pages rewritten were 81 to 96, 113 to 144, and four new pages were added, marked 141* to 144*.

in elucidating, extending, and diffusing it, are either dead or so far advanced in life as to be no longer capable of new investigations; while the body of facts and deductions which they have published have been, and still are, far in advance of public opinion, but so imperfectly known to and appreciated by the class which labours to extend the boundaries of science, that fewer motives are presented to young men to cultivate this particular field than to prosecute other more popular departments of investigation. The only advance which, in these circumstances, could be expected has actually occurred—namely, a wider diffusion of Phrenology, and a juster estimate of its merits among the people at large. Its influence is now discernible in general literature, and in educational and other reforms."

The beginning of 1854 found Combe confined to the house with a severe cold. A bed was erected in the library, and there, amidst his books, with Mrs Combe always at hand to read to him, or to find the particular work he might require, and with his desk so arranged that when in the mood he could add some improvement to the "Inquiry into Natural Religion;" or write out some additional illustration of the religion he sought to teach; or stir some flagging friend in the cause of education with one of his carefully written arguments; or scold a tenant for the neglect of some part of his bargain; or give wise and useful counsel to the troops of young men and maidens who regarded him with awe, as the man who could almost read their thoughts, and sought the help which was always willingly and most earnestly given—in the midst of these comforts and with these occupations Combe was able to endure his ailment with philosophical equanimity, and to find many compensations in his surroundings. He saw his wife unusually well, and it delighted him that this winter she was able to gratify her taste for the Italian Opera. Madame Caradori was the prima donna of the company then performing at the Theatre Royal, and Mrs Combe said that in acting she

approached nearer to her mother than any one who had appeared since that great actress had left the stage. So much was Mrs Combe impressed by Madame Caradori's genius that she wrote a letter to the *Scotsman* comparing her with Mrs Siddons.

Combe had by this time almost resolved to publish his "Inquiry into Natural Religion," and writing to Dr Charles Mackay, 18th January, he said:—

"I am not a believer in Clairvoyance or in other spiritual communications; but Mrs Combe and I often talk of 'a spirit of the world' (electrical perhaps), which seems to communicate between us and our friends; that is to say, when we earnestly talk about them we very often hear from them or about them unexpectedly immediately after. Your letter to me of the 14th January is a remarkable example in point. On the 14th January we were talking of you, and feared you were unwell. She opened the glass door of the book-case to look for a book, and said: Here is 'Egeria'* which you wanted and could not find, and she gave it to me. I read portions of it on Sunday and Monday, and it lies still at my bedside. I said to her: 'I should like that he (Dr Mackay) could find time to read my Inquiry, for I do not like to offer him the dedication of it until I hear that he is not offended by it, and he is the friend of all others in this country to whom I should wish to dedicate it, because he is the first who has seen and published the grand future that awaits poetry when she shall discover her own true vocation as the tuneful organ of the higher attributes and relations of human and external nature.' Next day your letter reached me."

Dr Mackay at once assured him that he was not at all afraid of the consequences which might arise from his being identified with the views expressed in the "Inquiry."

The final arrangement of it for the public was, however, still in the future, and the subject which most immediately engaged Combe's attention in January was the slanderous and absurd attack on Prince Albert in connexion with the Russian war. He looked upon the charges as ridiculous in the extreme, because they made His Royal Highness act in direct opposition to his own character and interest. The scandal was

* "Egeria," by Dr Mackay, was dedicated to Combe.

easily extinguished by the statement of a few plain facts in Parliament; but before Parliament opened, it had assumed terrible proportions in the eyes of an excited and ignorant mob, led and deceived by a few sensation-mongering papers. Many earnest pens at once took up the defence of the Prince, and Combe's was amongst the first. He felt deep indignation at the clamour, and wrote two long letters in the *Scotsman* and one in the *Morning Chronicle*, endeavouring to recall the people to reason by a calm, clear, and systematic statement of the position of His Royal Highness. He sketched his previous career, reported what he had heard of him in Germany, reviewed the active part which the Prince had taken in fostering the best interests of the nation, and in furthering all schemes which promised to be of practical use in ameliorating the condition of the people, and in advancing science and education. The conclusion of the second letter will show the tenor of the others:

"As a moral reformer he must be obnoxious to all who hope to promote national progress through insurrection, war, and new political combinations, irrespective of the possession of knowledge, cultivated moral and religious principle, and self-control by those who are intended to wield electoral or legislative power. As a moral reformer he must be hateful to all who, conscious of their own stinted capacities and attainments, tremble for their social position should the lower and middle-classes be thoroughly instructed and civilized. As an advocate of the application of science as a guide to prosperity, he may probably appear as dangerous to those who dread science and its applications as revolutionary, and would prefer perpetuating the reign of habit, authority, and antiquated opinions as the safest guardians of national well-being. But in proportion as these classes of persons have reason to fear or dislike the Prince, so his character and reputation become sacred and dear to every progressive and patriotic mind."

The letters were vigorous, and obtained the more weight with the public because the writer was unconnected with the Court. There never was scandal so unfounded, and there never was one which evaporated so quickly as this one about

Prince Albert. In June, Combe was again summoned to the presence of His Royal Highness, who personally thanked him for his services. He also, in the course of an interview of an hour and a-half, conversed confidentially with him regarding Lord Palmerston and Louis Napoleon, expressing an opinion of the latter very different from that which he subsequently entertained.

July and August were again spent by the Combes on the continent. At Munich, Combe returned a visit which Baron Liebig had paid him in Edinburgh, and he was present at the opening of the Bavarian Crystal Palace. Schools, prisons, and the picture-galleries, as usual, occupied the chief part of his time; and he wrote Lord John Russell an admirable description of the system of education pursued in Switzerland. The journey homeward was made through France, and observing the activity and gaiety of the capital, he exclaimed, "Paris is too young for me." He saw the Emperor several times, admired what he had done for the city, and owned himself puzzled by his character and achievements.

"The *means* by which he has placed himself in his present exalted position imply such a deficiency of natural moral principle in his mental composition, that, like his great prototype Napoleon I., he will run constant risks of making shipwreck of his fortunes against the eternal laws of justice. Prosperity, by stimulating his ambition, and exciting him to acts uncontrolled by conscience, may prove more disastrous to him than adversity; and he may add another to the numerous examples afforded by history (although still little understood), that there is an actual divine government of the world which baffles all human ability when it pursues national greatness by means condemned by the great principles of benevolence and equity. Promising, therefore, as present appearances are, I cannot help regarding him as a great meteor in the European horizon, which, although now emitting only bright and cheering rays, is liable at any moment to explode in disaster and destruction to all within the reach of its influence."

A series of seven letters to the *Scotsman*, afterwards issued as a pamphlet, gave an account of this tour. His health had

been good throughout the greater part of the journey, and at Augsburg on the 25th July he made this note:—"This is Cecy's birthday; she has now completed sixty years, and enters on her sixty-first. We thank God ever and anon for so much health, strength, prosperity, and enjoyment, for both of us have enjoyed Munich very much. I limit my exertions to my strength; rest by far the greater part of the day; take food in small quantities every three or four hours night and day, and by doing so I have a constant feeling of *bien-être* which renders life truly enjoyable. I see now that for the last fifteen years I have positively suffered from habitually overworking myself physically and mentally, and attempting to support my strength by eating at one time more than I could well digest. The bad digestion in later years impelled me to abridge more and more the quantity I ate, without increasing the number of meals, and hence arose a state of habitual *malaise* when I had any exertion to make." It was fortunate that he was in this good condition, for whilst taking a drive in the neighbourhood of Lucerne, the carriage was overturned into a shallow stream. Combe was thrown over his wife, and struck his head against the side of the carriage; Mrs Combe was almost unhurt; her maid, who had been beside the driver was tumbled into the water, but escaped with little injury. A stiff neck and some nervous weakness were the effects of the accident on Combe, but he was able to travel to Zurich on the second day after the occurrence. Here he took a day's rest and occupied the time with reflexions on death and his own condition, studying the changes he observed in himself with philosophical interest, and noting them with scientific precision.

"Zurich, *August* 8.—One generally speaks and thinks of death as if it were an occurrence of a casual character caused by a fever, consumption, a severe injury, or something abnormal causing the corporeal functions to cease their action. This description is correct previous to the middle period of life; but at that time a natural process of decay commences of

which death is the issue; so that it is a long and very gentle process, and disease is really an interruption of it, bringing it suddenly to a close. Here am I at least half dead, and yet enjoying much. In comparison with what I was and could do thirty years ago, I am more than half dead. My head is bald, my teeth are mostly gone, I am a good deal deaf, my sight is available for reading only by the aid of spectacles, my digestive power and breathing power are diminished by one-half; on many days I desire only to sit and look outwardly or talk lightly. I can read very little without falling asleep, write but little at a time without being fatigued, walk only about two miles in a day, and sleep enormously. All this is partial death, and an evident preparation for it; and yet it is very agreeable, and I am very happy. The bluntness of the senses, and the dulness of the brain render me insensible to many disagreeable impressions and annoyances, and the moral sentiments and intellect being the faculties still alive and most active, I find objects to interest and gratify them everywhere. My organism is constantly liable to run into a state of painful thinking, accompanied by anxiety and irritability; but by James Coxe's skill I have discovered that this arises only from over exertion, physical or mental, or too long fasting, or eating improper food, and I am able generally to discover the cause, and to remove it, and then the condition of calm enjoyment returns. I write these remarks because I have seen many persons suffer severely in the decline of life from sinking of the vital power, and the irritability attending it, who, it appears to me, might have greatly mitigated their sufferings, perhaps removed them, by removing their causes. I now see the great wisdom of my late brother Andrew's method of acting during the many years in which he was in a condition resembling that which I have now reached. It is right also that justice should be done to nature, and due acknowledgments made of the benevolence of Nature's God, even in death."

On his sixty-seventh birthday he wrote:—"I am as cheerful as at any period of my life, and wait the appointed day in calm reliance on Him who gave life for a season, and by whose laws it comes to a close."

## CHAPTER X.

1855–1856.—THE RUSSIAN WAR—THE TURKS AND THE RUSSIANS—MISS DIX AND LUNATIC ASYLUMS—"PHRENOLOGY APPLIED TO PAINTING AND SCULPTURE"—THE CURRENCY QUESTION—IMMORTALITY—LETTER TO HORACE MANN—SEVERE ILLNESS—SUBMISSION TO THE DIVINE GOVERNMENT—KOSSUTH—THE INFLUENCE OF PREVALENT CREEDS—THE WATSON INSTITUTION—LAST TOUR ON THE CONTINENT—OBJECT OF HIS WORK ON "SCIENCE AND RELIGION."

THE war with Russia, which was at its height in 1855, was depressing trade, arresting progress in social reforms, raising taxes, and under its shadow, Combe said, "nothing flourishes but orthodoxy and drunkenness." He did not believe in "peace at any price," yet he went farther than John Bright or Cobden in declaring against the necessity of war. He explained his principles in a letter to the Peace Congress in 1853, and in letters to the Rev. Dr Robert Lee and to Cobden in 1854-1855. To the latter he wrote:—

"Edinburgh, 6th January 1855.

"MY DEAR SIR,—Your letter of 9th December gave me much pleasure, and I have since read your speech in Parliament on the war. In its grave and earnest tone, and its comprehensive reasoning, it appeared to me altogether befitting the subject and occasion. There was only one point in which I differed from your view of the war, and it was this. You seemed to me to leave out of sight the Emperor of Russia's proposal in the secret correspondence to partition Turkey. The English Ministry *knew* that this was his object, although in their correspondence previous to the publication of the *secret* proposals they could not publicly say so. I use that proposal as a key to the intention entertained by him in all his subsequent diplomatic demonstrations. Mr Bright also omits

all reference to that proposal; I read every word of the pamphlet in vindication of his celebrated letter, and found it so complete, on the basis which he took up, that it created wonder how the ministry *could* so stultify themselves; but then, in my opinion, the basis was not complete—he omitted the Czar's proposal to partition the Turkish dominions, and this makes a vast difference.

"In my individual capacity, I go further than either you or he against the necessity of the war; but I am quite satisfied that my notions are not such as any statesman, in the present stage of public conviction, could act upon, and, therefore, I have never *published* them, although I wrote them to a friend before hostilities began. They are these:—

"I, fanatically, as you once told me, believe in an *actual* divine government of the world on *moral* principles. Now, the Turks have, through defective brains, or a false religion and irrational political institutions, remained in a state of helpless barbarism, while the European and Christian nations have been rapidly advancing in civilisation. They have become a public nuisance, and their imbecility and vices bring them under that law of nature which sternly decrees reformation or destruction as the only alternatives left to such a people. They have failed to reform themselves, and the only other alternative is destruction. They are presented as a prey tempting to their nearest ravenous neighbour, who is sufficiently ignorant and sufficiently barbarous also, to be inclined to undertake the task of destroying them; for, observe, no thoroughly enlightened and civilised people would *willingly* undertake this work; for reasons to be immediately stated, Russia is so qualified and inclined.

"Well, suppose that Europe had left the Russians to take their will of the Turks, what then? A war of extermination between the Turks and Christians, like that which occurred in Greece, would have ensued; and after horrible calamities the Turks would have been exterminated or driven into Asia Minor, where they would have found a civilisation as low as their own, and been in their proper places. Would such a war, would the military occupation of such a country, have added to the strength of Russia? In my opinion, quite the contrary. Her share of Poland has *weakened* her. Turkey would have weakened her in two ways—first, by the insecurity of the possession for a century to come; secondly, by extending her own colossal dimensions, for in proportion to the advance of the Russian people in intelligence will the difficulties of administering such an Empire from one focus, St Petersburg,

increase, until they become insurmountable. Constantinople might have tempted the Russian Court to leave their northern capital and come to it; and this, by loosening the bonds now binding the most advanced portion of Russia, would have hastened the day of her internal disruption.

"I have said that no thoroughly enlightened and civilised nation would have undertaken the conquest of Turkey, although invited, and why? Because the order of God's providence being *moral*, there is only one way to true national prosperity and glory—viz., by developing the higher mental faculties of the people, and directing them to the improvement of their own condition by skill, industry, and honesty, applied to their own soil, and other natural resources, and by honesty and benevolence practically carried out in all their foreign relations. If I could convert statesmen to this faith (the Emperor of Russia, for example), they would turn from this conquest of Turkey as a wise man does from alcohol, as poison, in his case to health, in their's to national prosperity.

"Do I mean, then, seriously to prefer the enactment of the horrors which I have described to the course aimed at by England and France of preserving Turkey, and trying to civilise her? I certainly should not do so if I believed in the capacity of England and France to execute their virtuous intentions; but they are not themselves sufficiently enlightened to have a chance of success. Both are utter disbelievers in the reality of the moral government of the world; and the *means* by which they will try to improve the Turks will be erroneous in principle and futile in result. In my opinion, therefore, the conquest by barbarous Russia would, in the long run, be a minor evil than the course now aimed at by our statesmen. It would resemble the Irish famine, or a crisis in a dangerous disease—be terrible while it lasted; but it would be *the beginning of the natural cure.* The two barbarous races would exhaust on each other the utmost resources of animal propensity, and then, wearied and worn, like two stags that have fought till one has died, the stronger (Russia) would begin the work of reconstruction with the Christian population of Turkey on a basis that admitted of improvement, and her despotic rule, embodying at the same time the essential elements of social order (viz., respect for the rights of property and the rule of law over the relations of citizens with citizens), would lay the foundation for a growing civilisation.

"Long before she could consolidate Turkey into an element of aggressive power against the rest of Europe, the causes of her own dissolution before hinted at would have begun to

operate; and perhaps, also, the example of how little she had benefited herself by her conquest might begin to open the eyes of future statesmen to the true sources of national well-being.

"But, as I have said, all this is at present, in most men's judgment, pure Utopian nonsense; and, therefore, it is in vain to urge it on public attention; and as experience is still so limited (the United States and Canada being the only instances of the successful application of the moral principle, after trying the selfish and animal one in vain) I may be wrong in my notions, and it might be too hazardous to act on them.

"I conclude by observing, that among the causes enumerated by you in your speech, such as the death of Nicholas, &c., that *might* occur to prevent the renewal of the war, if we now make peace, you did not state the one that I lay stress on—namely, that, as he professes to be a highly religious sovereign, perhaps, by his perceiving the success of our free trade measures and our liberal treatment of our colonies, the conviction might dawn upon him that developing the industry and intelligence of his vast Empire was not only a more Christian, but a more certainly successful mode of raising the wealth, power, and grandeur of Russia than the conquest of barbarous hordes of Turks and Tartars; and that under this persuasion he might have ceased to *desire* conquests, and, therefore, not renewed his aggressions on Turkey. But I presume this, too, would have been too Utopian for the House of Commons."

The sufferings of our troops at the siege of Sebastopol cast a gloom over the public mind; and Combe, referring to the subject, shows the high estimate he had formed of her Majesty's intellectual powers. "System pervades everything in the palace. If the Queen had been with the army in the Crimea, she would have saved it from the horrors caused by the absence of all administrative talent."

In January he learned that payment of the dividends of the Philadelphia, Wilmington, and Baltimore Railway was again suspended. The misfortune disturbed him much less, however, than the first suspension, for his wants were now fewer than at that time, while subjects to occupy his mind and pen were as numerous as ever. He was at sixty-seven making the period of life, which is with most people one

of mere retrospect, fruitful in active service to the interests of humanity. The treatment of the insane had always obtained a large share of his attention, and when Miss Dix,* from Massachusetts, on her philanthropic mission of inspection into the condition of lunatic asylums, arrived in Scotland, she at once visited Combe. He entered into her project with his customary earnestness in all good work, and by his advice and introductions, gave her material assistance in those efforts to induce the English Government to appoint the Royal Commission of Inquiry into the condition of Lunacy in Scotland, which resulted in the establishment of the Scottish Board of Lunacy.

In May he completed his work on "Phrenology applied to Painting and Sculpture," and it was published on 1st June. The greater part of it had appeared at intervals in the *Phrenological Journal*, but he had improved and added to the work in the course of his annual visits to the principal picture galleries of England and the Continent, and it now formed a volume of 158 pages. He travelled on the Continent, with the Rev. Dr Robert Lee as a pleasant companion on various stages of the tour; saw the Paris Exhibition, and contributed to the *Scotsman* a series of his most vivid sketches of the highways and byways of France, Switzerland, and Germany. He returned to Edinburgh in the autumn "feeble, but otherwise well." The commercial crisis of the year called forth his important series of articles on the "Currency Question," which appeared in the *Scotsman* in November and December; and, although interrupted by severe illness, were resumed and completed in February 1856. These articles attracted wide-

* "February 4, 1855.—Miss Dix visited us. She is a quiet, active, practical lady, between fifty and sixty from appearance, who has devoted herself to lunatic asylums, prisons, &c. She has induced the United States Government to erect twenty-three asylums, and the British Government to institute two in Canada and one in Nova Scotia chiefly for middle-class patients. She has also induced these two Governments to build a light-house and keep life-boats on Sable Island, Nova Scotia."—*Combe's Private Journal.*

spread attention, and when reprinted in pamphlet form, they reached a seventh edition within a few months. They elicited correspondence and approval from Lord Overstone, A. E. Cherbuliez, and others; and Mr M. B. Sampson (for many years the "city" editor of the *Times*) said that "the highest praise is that they read like a chapter of the 'Constitution of Man.'" In these articles Combe supplied a concise exposition of the principles and operation of the Bank Charter Act of Sir Robert Peel. His aim was to show that the laws which regulate the production and distribution of wealth are based in nature and are universal in their operation. That money and banking are merely instruments for facilitating production and distribution, and are "as thoroughly subject to the same laws as the motions of a satellite are to those of the principal planet." He therefore sought to demonstrate that it is necessary to the welfare equally of banks and their customers that bank notes should not be permitted to sink in value below that of the currency of other countries using specie as their standard; that certain and immediate convertibility alone could maintain the bank note equal in value to specie; and that in certain circumstances contraction of issue was indispensable to maintain this convertibility, and was, therefore, called for by the best interests of the community. The clearness and vigour with which he handled this most difficult subject showed no diminution of mental power; and the value of his contribution to the solution of the currency problem was extensively acknowledged.

Whilst he was at Kingston-on-Thames, in June 1855, he replied to a letter of fourteen quarto pages, received from Horace Mann, dated Yellow Springs, 2d April, advocating immortality as demonstrable by reason, and necessary to render existence on earth endurable. Mr Mann had read a portion of the "Inquiry into Natural Religion," but being appointed president of the Antioch College, he had mislaid the book in the confusion of removal to a new house; he had misappre-

hended Combe's argument, and so wrote this earnest appeal to him to suppress the book for the sake of the many who at present accepted him as their guide in the philosophy of life, and who would be unsettled by the publication of these new views. Combe answered, giving full expression to his thoughts on immortality, and he desired that the answer should be published in his biography.

"London, 9*th June* 1855.

"My Dear Mr Mann,—Before leaving Edinburgh for the Continent till September, I received your long, earnest, and welcome letter, and my only regret is that you took the trouble to write at so great a length before you had read my book to the end. It is now two years since it was sent to you, and I despair of living to hear your opinion of its 'entirety.' If you desire me, I shall send you another copy to supply the place of the one mislaid. In *hoc statu* I can advert only to two points in your letter;

"1st. I do not *deny* immortality to man. My proposition is this: God had a purpose in calling man into existence. If that design requires man's existence in a future state, he will assuredly live again; if it does not, this world will see his existence close for ever. Now, my faith in the wisdom, power, and goodness of God is so entire, that I surrender my future destiny to Him with the same complete confidence that I should feel in going to sleep in the lap of the most affectionate parent. I cannot penetrate into his design in calling me into existence so completely as to discover that it *certainly embraces* a future life, but I see nothing that *necessarily* contradicts it. My faith in Him, however, is so perfect that it raises me above all anxiety about it. I know that no opinion which I can form will have the least influence on the fact itself; and why, therefore, should I render myself unhappy by striving to extort from God a secret which He appears to me to have placed beyond my reach to try my faith in Him? Is this not a higher state of mind than that which *demands* immortality as a right, or clings to it as a necessity?—I mean as a conviction necessary to render this life endurable.

"Is not this intense longing after immortality in a state of bliss just a form of egotism? It appears to me to arise from 'the love of life,' and self-love, and hope, all combined. These are strong feelings in some men, and I have met with

several who considered the boon of life necessarily to imply its everlasting continuance, and who said that God could neither be just nor benevolent if he withdrew this gift after once having allowed its inexpressible sweetness to be felt; but this appears to my organism to be selfishness and exaggeration. I have enjoyed life perhaps as much as most people; but because I have received this boon for sixty-six and a half years, I neither feel nor understand on what ground I can complain of my Creator if he should have no further duty for me to perform, and should in a year or two more lay me aside as a worn-out instrument.

"The first time I heard man's immortality doubted was in the year 1810, and as the doubter was a serious and sensible friend, I was much shocked; but I consider my moral and intellectual nature to have improved, and my egotism to have decreased since those days, and I can now resign myself to God's will with entire equanimity, being ready to bless Him for what I have received if this life be all, and to rejoice in Him for evermore should His bounty be extended through eternity. Since I reached this frame of mind my heaven has been, following out by the aid of Causality and Hope, the future progress of the human race in knowledge of God's laws, in obedience to them, and in virtue and happiness. I live in the future, and in this sense I already enjoy a glorious immortality; I can sit for days, and months, and years in busy investigation and contemplation of this bright futurity to man, and my Benevolence and Ideality and Conscientiousness kindle into a glow, and I feel an intense happiness. Faith is here supported by Causality—I see not only the promised land, but the road that leads into it; and I see that, of necessity, the time will come when myriads will walk in that way, and be partakers of a terrestrial existence immeasurably superior to ours. It is not necessary to my enjoyment of this prospect to feel *certain* that I shall be a conscious spectator of its realisation. In point of fact, when I try to form a specific notion of my personal future existence, I am lost in contradictions. All my faculties are fashioned for the scene in which they now act, and I cannot conceive what they would do or feel in a sphere in which there was no matter, no male and female, no young and old, no ignorance to be removed, no intellectual problem to be solved, no suffering to be relieved, no justice to be performed. There must be a *new earth*, otherwise we must be *so entirely changed in our nature* as to be no longer the same beings that we are here. As I cannot comprehend this new state, I cease to take interest in it, and repose implicitly on God's wisdom, goodness, and power.

"I do not enter into an examination of your arguments for immortality, for I do not *deny* it, and have no wish to shake your faith in it, if that faith is satisfactory to your own mind and supported by your own convictions. I abstain, also, because I should hold myself called on to state the other side likewise. It is only by considering both sides that we can hope to reach truth. You appear, however, not to be aware of the state of opinion on this subject in the highest class of thinkers in Europe. They, or rather many of them, have given up immortality as untenable, and consider me fanatical for holding even the modified faith in its possibility which I have here expressed. I have been told, again and again, that I might safely publish my work, as it stands, in London without losing the estimation of good and enlightened men, and that I might come and reside here, after such publication, with undiminished respectability and usefulness. It is my local situation in Edinburgh, in a focus of bitter fanaticism, and surrounded by female relations and feeble friends who could be made to suffer intensely by the onslaughts of bigotry on my reputation, that prevents me from publishing at present. My executors are well acquainted with the book, with the state of opinion, and with the liabilities of these individuals to suffer by its publication; and as time is of small importance (there being no injury done if the world should in the meantime go past my views), it is probable that it will not be given to the world till you, as well as they, are off the scene. I differ from you, however, as to the morality of posthumous publications. When a man is beyond the reach of personal annoyance, the small and malignant minds are deprived of their grand inducement to assail, misrepresent, and obstruct his opinions. These are then taken up more readily on their own merits; and if they be true, they sooner produce good fruits; whereas if false, they more speedily perish and fall into oblivion."

The illness which interrupted the articles on the Currency was one of the most serious nature. It commenced in December; but, although in great pain, he entertained the principal members of his family at dinner on Christmas Day; again, on 12th January 1856, a party consisting chiefly of Americans and Germans dined with him, but on the following day he was much worse. On the 31st he was prostrated with pain, and Dr James Duncan was called in to assist his regular

medical adviser, Sir James Coxe. From the 1st to 3d February he was thought to be dying, and on the 8th of that month he underwent an operation, in which the state of his lungs and heart forbade the use of chloroform. He was assured of recovery, and he regretted that all this pain would have to be endured again within three or four years. But in the midst of all his sufferings he acknowledged that they were the result of some error committed in ignorance of God's law, and believed that it was only through ignorance that they could not be alleviated. He was patient in his agony, and anxious to learn its cause that he might warn others. When still suffering, although now on the way to convalescence, he caused Robert Cox to write the following note :—

*Memorandum of a Conversation with Mr George Combe, 21st February* 1856.

"Mr Combe in talking of the acute suffering he had lately endured, mentioned that during his illness he constantly looked forward to death as a great relief, and when in greatest pain longed for the grave with an earnestness which now he cannot approve of, as he thinks it was too selfish, and not consistent with due submission to the plan of the Divine Government. He said that at no time has he ever felt that he had a secure hold of life, and never made plans extending beyond two years for their execution, and that not a day has elapsed in which death did not occur to his thoughts as an event probably at no great distance. When his brain is examined he wishes particular attention to be paid to that part which has been supposed to be the organ of the love of life, which in him is so weak.

"He mentioned that during his suffering the only parts of his conduct which gave him pleasure in retrospect were deeds of benevolence. The exhaustion of his nervous system under the pain frequently led to intervals of insensibility with consciousness, and he could then understand from experience the truth of what is recorded of martyrs falling asleep under the tortures inflicted on them." R. C.

In his journal he makes grateful mention of his nurses, Robina Ivory (his niece), Helen Steel, who acted as house-

keeper and maid to Mrs Combe, and Christina, a housemaid, whose surname is left blank. His sisters also assisted occasionally, and would have done more, but consideration for their years rendered it necessary to restrain their affectionate ardour. When convalescence began, he recovered with a rapidity which surprised himself, as well as every one else; and the letters of congratulation which poured in upon him indicated the esteem with which he had inspired many with whom he was only slightly acquainted. He had passed through all the conscious stages of dying: there had been moments when his heart ceased beating, and the end seemed to have come. "God seemed a complete mystery to my faculties. The conviction of His existence and of His power, wisdom, and goodness never faltered; but His nature and Being were incomprehensibly mysterious. I had complete faith also that I had been called into existence by design, and was an atom, however small, in a great plan which had happiness to man for its chief object, and which would in the course of ages be accomplished. And I thought I saw *how* it was to be realised, by man discovering the laws and relations of his own nature, and acting like a moral and rational being in accordance with them. I could not comprehend a future life. Everything seemed to indicate that I was fashioned for this earth and its objects and relations, and I did not expect a future existence, and felt no hardship in laying down my present consciousness for ever. But I believed that if God's scheme included my resuscitation I should certainly live again; if not, that it was impiety to complain. My only anxiety was for poor dear Cecy. She would suffer terribly when I left her. She stood this trial with great efforts, and bore up wonderfully and comforted me at the worst; but as I recovered, the strain on her system brought her low, and she is now suffering."

His restoration to comparative health was so rapid that in the beginning of March he was able to resume some of his

usual avocations, and he wrote two long letters to Lord Ashburton on education, with particular reference to the education of the working-classes. Towards the end of the month he was able to receive his friends, Charles Maclaren, Dr Hodgson, Professor Henry D. Rogers, the geologist, from Philadelphia, and Dr Findlater,* and to discuss with them educational matters, and the project of employing a lecturer for a year to expound physiology and social economy as examples of the divine laws which regulate health and wealth whether men understand them or not. On the 30th April he attended one of Kossuth's lectures in the Music Hall, and a few weeks afterwards the Hungarian patriot breakfasted with him.

"Kossuth appears to be forty-six or forty-seven years of age; a very little under 5 feet 8 inches in height, has a large head, large lungs, and well developed limbs, all well proportioned; the brain predominating a little in relative dimensions. His temperament is bilious, nervous, lymphatic. His brain is of the Teutonic type; broad, both on the base and top; the coronal region is large, the breadth exceeding the height. Self-esteem is much smaller than Love of Approbation, which is large. The anterior lobe is not long from front to back, is not high, is very broad, and is developed to an extraordinary extent in the lower region, and also in the middle region; the upper or reflecting organs being relatively inferior in size to those in the other two. Language is large. The result is an intellect of wonderful perspicacity, sufficiently logical to command assent, but neither comprehensive nor profound in the highest sense of the terms. His moral sentiments furnish the basis of his thinking, and their dictates, embodied in the most appropriate language, and delivered with admirable perspicacity, great softness of manner, and deep earnestness, give him great influence and impressiveness as an orator. The predominant benevolence, veneration, and justice which distinguish all his leading propositions and illustrations, drew forth enthusiastic cheers of approbation from the audience. It consisted of middle-class citizens, with admirable foreheads and coronal regions. They were the highest brains, taking both regions into account, I had ever seen in the Music Hall, and as I was

* Dr A. Findlater had been six years at the head of Gordon's Hospital (for education), Aberdeen, but was now devoted to literature, and has since obtained especial distinction as the responsible editor of *Chambers's Encyclopædia.*

on the platform I saw them well. It was delightful to hear the responses to his appeals for justice to Catholics, Protestants, and religious believers of all sorts, at the hands of each other.

"This morning we discussed the influence of the prevalent creeds on civilization, and the necessity for a new reformation and a new Luther, which he had announced in his first lecture. I asked him how far he would carry his reformation, and on what he would found it. He said that we must have dogmas; that he would take as dogmas those points in the Christian religion on which all are agreed, and have a clergy that would teach these and their practical applications to human affairs. I mentioned that such dogmas wanted a foundation and a sanction, that George Dawson and Theodore Parker are preaching on the basis of the character of Christ but are beating the air merely, and that our new religion must be based on God, the natural laws as the instruments by means of which He governs the world, and that the clergy must expound these laws as Divine revelations, show the physical, physiological, and mental mechanisms by which they are rendered efficacious, the punishment or sufferings for disobedience, and the enjoyment attached to observance; and train the religious emotions to reverence these institutions and God as their author, and to regard obedience as worship.

"He said that he acquiesced in all these views, and that thousands in Hungary and Germany entertained them, but none would incur the risk of the loss of social position, political disqualification, theological odium and persecution, and probably pecuniary ruin, by avowing them and acting on them; that ultimately, in some centuries, they will prevail and become the religion of civilized nations, and that their only chance of an earlier acceptance would be were a great revolution to occur on the Continent, particularly in Germany; and then the existing Christianity might be abolished because it has been employed solely to stifle liberty and to oppress the conscience. Christianity, he said, has never aided liberty. In all ages and in all countries it has been employed to enslave the people and enthral their intellects. In the United States of America alone would it be possible to found and find followers for such a reformation, because there alone a man forfeits no civil rights by his religion."

Combe, in his letter to Cobden (page 318), refers to his connection with John Watson's Institution. Since 1851 he had been striving to introduce a better system of diet for the

children, a closer inspection of the sanitary arrangements of the whole establishment, and to make the elements of Physiology one of the subjects of instruction in this school, and also into the Industrial School. In support of the latter object, he in 1853, with the assistance of Sir James Clark, obtained an opinion in favour of teaching Physiology and the laws of health in common schools. The Opinion* was signed by sixty-five of the leading physicians of London, including the principal teachers of anatomy and physiology and the practice of medicine and surgery in the metropolis, and all the medical officers of the royal household. Although originally intended to overcome the prejudices of the directors of the Industrial School, the document was deemed too important to be confined to that object, and it was accordingly placed in the hands of the Government Committee of Council for Education. It was printed and widely distributed, with its long array of influential names.

"The government gave effect to it by ordering the preparation of an elementary work on Physiology applied to health, and suitable diagrams to illustrate it, for the use of schools, and by instituting examinations in Physiology, and making a certificate of ability to teach it a title to an increased allowance of pay. These facts have been ascertained by correspondence with Dr Lyon Playfair, of Marlborough House, as falling under his department of the educational

* The following is a copy of the document:—"Our opinion having been requested as to the advantage of making the Elements of Human Physiology, or a general knowledge of the laws of health, a part of the education of youth, we, the undersigned, have no hesitation in giving it strongly in the affirmative. We are satisfied that much of the sickness from which the working classes at present suffer might be avoided; and we know that the best-directed efforts to benefit them by medical treatment are often greatly impeded, and sometimes entirely frustrated, by their ignorance and their neglect of the conditions upon which health necessarily depends. We are therefore of opinion, that it would greatly tend to prevent sickness and to promote soundness of body and mind were the Elements of Physiology, in its application to the preservation of health, made a part of general education; and we are convinced that such instruction may be rendered most interesting to the young, and may be communicated to them with the utmost facility and propriety in the ordinary schools, by properly instructed schoolmasters.—London, *March* 1853.

measures adopted by the Board of Trade; and he has stated also that the Committee of Council for Education in England, and the Commissioners of Education in Ireland, are co-operating with the Board of Trade in the introduction of Physiology into schools."

In 1854, Combe was unanimously elected one of the directors of the Watson Institution, and convener of a committee appointed to report on the question of introducing Physiology into the school. A report in favour of doing so was presented, and, after many drawbacks, the directors adopted the report. On the 3rd May 1856, the directors attended an examination of the senior children in Physiology, and the most persistent of the opponents made a speech, in which he commended the subject, the teacher (Mr Jardine), and the children. The good was accomplished, and Combe was grateful. He lived to see the other improvements which he advocated in the institution carried into effect.

Combe ventured upon his usual tour in June, July, and August to London, France, and Germany. But this was more on Mrs Combe's account than his own. She was now in excellent health, which delighted him, and he was loathe to deny her any pleasure. He found the journeys, however, too fatiguing, and he was glad they were not to be repeated. With pathetic resignation he was taking his last look of the scenes which had afforded him so much interest in former years. The rush of young life which passed before his eyes—the bright faces of the honeymoon tourists, and the eager youth making his first acquaintance with the Continent—all thrilled him with happy memories, and it gave him pleasure to watch them in the halo of dawn, whilst he was passing into night. In Paris he wrote: "Everywhere young eyes and young brains are looking on its attractions, and enjoying them. I have had my day, and rejoice to see them happy, vigorous, and active. God leaves no regrets in my mind at parting from them for

ever; for the power of enjoyment is gone, and to me they are no longer objects of excitement but of fatigue. How wisely is the way to the grave prepared to be trodden without a feeling of bereavement." One source of quiet enjoyment he describes in the following passage:—

"I have, from time to time, learned short pieces of poetry by heart, which I repeat to myself in the watches of the night, to divert my attention from the physical malaise which I frequently feel in bed, and find them a panacea. I often go to sleep before reaching the end, for instance, of 'Lord Ullin's Daughter.' To-day, I have learned Campbell's 'Soldier's Dream,' which I have long admired, and added it to my stock. It (my stock) comprises, besides these two, 'Ye mariners of England,' 'On Linden, when the sun was low,' 'You told me once my smile had power,' 'How dear to me the hour when daylight dies,' 'I saw thee in thy youthful prime,' 'There was a time, a joyful time,' 'Why are you wandering here, I pray?' &c. In my days of vigour I had the utmost difficulty in learning anything by heart, my own compositions included. I tried again and again to write and learn speeches that I intended to deliver on important occasions, but always in vain. New words and new ideas, often much inferior to those I had written, crowded forth, and the speech committed to memory vanished. Now, no thoughts of my own intrude themselves; and although I learn slowly, I do so with pleasure, and find it a pastime."

He found his chief pleasure in communicating to the *Scotsman* his views of the condition of trade and finance on the Continent, which he signed "An Old Traveller." He returned to England about the middle of August, and the exhaustion produced by his journeys was removed by a few day's residence at Moor Park, Farnham, a water cure establishment, over which his friend, Dr Edward W. Lane,* presided. Thence he proceeded to Birmingham, chiefly to see Mr W. M. Williams, who was, however, absent on the tour, which was afterwards described in his "Through Norway with a Knapsack." The Combes then paid another visit to Richmond Park, Belfast, and returned to Edinburgh on the 17th Sep-

* Now of Sudbrook Park, Surrey.

tember, taking up their residence with Mr and Mrs Ivory at St Roque for a fortnight, as their own house was undergoing repairs. Although feeble, Combe continued to take an active interest in public and social matters. He received Miss Florence Nightingale, amongst other distinguished visitors, and she gave him an account of the sanitary deficiencies at Scutari and the Crimea; he maintained an extensive correspondence, and still contributed occasionally to the *Scotsman*. But his chief occupation was the preparation of his work on "Science and Religion," with which he was incorporating the "Inquiry into Natural Religion." He had commenced the work at Kingston-on-Thames in June, and the first sheet was sent to the printer in October. "The opinion that 'something' is wanting to serve as a guide in dealing with education and examinations for the public service, civil and military, and also to render religion practical, is gaining ground; but no one has discovered, to the satisfaction of his neighbours what that something is. It is a true mental philosophy. I shall try to explain this idea and its applications." To Mr R. F. Breed, one of the earliest correspondents who had been attracted to him by the "Constitution of Man," he explained that in this work he was attempting to do for religion what the "Constitution" aimed at accomplishing for secular action, namely, "to show the real basis on which all existing creeds rest—not on reason or evidence, but on mere training of the religious emotions to venerate *dogmas* as sacred, before reason is awake. I shall try to point out the evils of this practice; and to show that the order of nature is of divine authority, and that true religion will consist in reverence for the laws by which the divine government is maintained on earth; that it is perfectly practicable to train the religious emotions to venerate these laws in place of the present dogmas; and that this will be *natural religion;* a religion based on actual divine manifestations of wisdom, goodness, and power; a

religion in harmony with *all the human faculties;* a religion calculated to sanctify science, and give it a living practical interest, as an exposition of God's laws addressed to man for his guidance; and finally, a religion ever improving as human knowledge and experience extend."

Mr R. F. Breed, to whom these observations were addressed, had been a merchant in Liverpool. On retiring from business, he settled in the Isle of Man, and by his practical knowledge and wealth largely benefited local institutions there. He had often expressed his obligations to Combe for the satisfaction and help he had derived from his works. He now sent £50 for the distribution of cheap copies of the "Constitution of Man," and another £50 as a contribution towards the expenses of a cheap edition of the new work on "Science and Religion." He died in 1857, and left to Combe a legacy of £2000, one-half to promote the circulation of his works, and the other half as a mark of personal esteem and admiration.

## CHAPTER XI.

1857-1858.—"THE RELATION BETWEEN SCIENCE AND RELIGION" COMPLETED—REVEREND DR ROBERT LEE—PURPOSE OF THE WORK—A NEW RELIGION—"ON TEACHING PHYSIOLOGY IN COMMON SCHOOLS"—THE SOCIAL SCIENCE ASSOCIATION—OUR RULE IN INDIA—PHRENOLOGY—THE PHRENOLOGICAL MUSEUM—PROFESSOR LAYCOCK—PROGRESS OF SECULAR EDUCATION—LESSON IN PHYSIOLOGY AND SOCIAL ECONOMY—THE LAST WINTER IN EDINBURGH—THE PRINCE OF WALES—AT MOOR PARK—DEATH.

"22ND MARCH 1857. This day I have finished my work on 'The Relation between Science and Religion,' begun on 6th October 1856. After I got fairly into the subject my brain became active, I was able to understand it, and have prosecuted it without serious interruption to its conclusion this day. I thank God for so much health and vigour; for I have been able to work on it three hours a day pretty regularly. The remainder of the day was spent in meals, a walk of an hour, and repose. I have been greatly assisted by my excellent nephew Robert Cox, and the Rev. Dr Robert Lee has read some of the proof sheets, and kept me right as to matters of fact in theology. This has been a kind and very liberal act on his part, and was done without expressing any opinion on the general subject of the text. When I asked him to read the proofs, I stipulated that he should abstain from expressing his opinion, because he could not approve consistently with his position, and to condemn would do no good. He has acted on this agreement in an admirable spirit. I regard this as the most momentous in its consequences of all my works.

If its general principles are sound, they are calculated to lead to great and most beneficial results. If they are erroneous, they will die and be forgotten. If they are true, God has employed me as an instrument to expound the method by which He governs the world, and how man may accommodate his conduct to the rules of His government; in other words, to point out the way by which he may fulfil the highest objects of his existence on earth. I have had great enjoyment in writing the book. I shall never see its effects, and expect only disapprobation from the general mass of this generation; but I see a glorious land of promise shining in the rays of a purer religion and higher morality than have ever prevailed on earth, as the distant prospect from my mental Pisgah. If all this be a delusion and a dream, they have been pleasant illusions, and I hope that they may help to lead higher minds to truths which in this alternative I shall have missed. Dear Cecy has read the proofs, approved of them, and consented to the publication; but she trembles at the prospect of the unpopularity which the work may bring upon me. I am above fear of it."

The work contained the whole of the "Inquiry into Natural Religion," except only a few pages which appear to have been omitted because the ideas contained in them were repeated in other forms in the new matter. No principle or article of faith was suppressed; there was much re-arrangement of the order in which his ideas were explained; much rewriting and scrupulous revision; and it was with all the solemnity of one conscious that he was speaking his last words to the public, and with a deep sense of the responsibility involved, that he uttered his thoughts, giving the result of his life's experience and his innermost convictions. His main object was to show that there is no method by which man can discover how God governs the world except by studying the modes of action of the instruments by means of which His government is manifested and maintained. "If this fundamental principle

of the book be correct," he wrote to Dr Charles Mackay, to whom the work was dedicated, "it embraces every science. Each must contribute its light, and the full comprehension of the subject can be attained only when human discovery of the laws of nature is exhausted—which is a result *possible*, but that cannot be reached at any time that we can at present name. Hence the book teaches throughout that man's nature and improvement *are progressive*." To the same correspondent he revealed what was his expectation of the ultimate issues of the principles advanced in the book.

"Does the book unfold a new Religion,—*i.e.*, does it render Natural Religion an *actual reality*, by showing that there is, 1st, a real practical Divine government in the world; 2ndly, that the key to it is in the study of the instruments by means of which it is conducted; and 3dly, that the precepts revealed to us by it are adapted to our faculties, and our faculties to them? If this is made out, a new epoch is introduced in the progress of mankind. It will require a century or more before this new aspect of the Divine government of man can penetrate the general mind of Europe; but if it be *true*, only time is required. If this is not made out in the book—I mean, if principles leading to these conclusions are *not* satisfactorily established in it—then it is merely a view of a great subject taken by an individual mind; a help to progress, but not the foundation of an everlasting system of truth. I am anxious to have the opinion of an honest mind on this point; and if you tell me *candidly* your judgment after reading *all*, you will not offend but gratify me. No one is more anxious to escape from self-delusion than I am.

"I may mention that in 1839 the late James Wadsworth of Geneseo, state of New York, then seventy, and long a leading man in the legislature of that State, said to me one day when I was on a visit in his house, 'Are you aware that in the "Constitution of Man" you have given a new religion to the world?' I replied, 'No; I am not conscious of having done so, and certainly did not intend it.' He said, 'But you *have* done so. The views of the Divine government there unfolded will in time subvert all other religions and become a religion themselves.' He added, 'I call it Combeism.' I have never mentioned this conversation except to the members of my own family; but it set me on a new track of thought, and finally produced this work."

The leading conclusions at which he arrived were: 1. That this world is a Divine institution, and that it is our duty and interest to try to discover its plan and to conform to its laws. 2. That human nature will constitute the central subject of our investigations, and physiology will form one grand source from which the requisite information will be derived. 3. That man is constitutionally a religious being, that there is a firm foundation in Nature for religion, and that in his organs of the moral emotions he possesses an indestructible basis for morality. 4. That Nature is constituted in such a relationship to our religious faculties as to inspire us intuitively with belief in the existence of a supernatural Power and Intelligence whom we call God. And 5. That by viewing our own constitution, and that of the external world, as institutions proceeding from this supernatural Power, our duties become obvious. These conclusions are the outcome of the principles which regulated his own life, and their practical influence is apparent in his conduct and in all that he has written.

The book was published in April 1857 as the fourth edition of the pamphlet of 1847,* and it was simultaneously issued in German by E. H. Mayer, Leipzig. The translation had been made by a German lady, Ida Von Busse, who had been staying with the Combes during the winter, and who executed her task under the author's supervision. Contrary to Combe's expectations, the book sold well, and from numerous correspondents he received congratulations, commendations, and suggestions. The Rev. Dr Robert Lee thought the Introduction equal to anything he had ever written, in clearness, vigour, and animation; and added: "It is also pervaded by *a most religious spirit*, and it will be felt to be deeply interesting and important even by many who are not prepared to sympathise with its views." So satisfactory was the reception

* There was a slight variation in the title, that of the pamphlet being, "On the Relation between Religion and Science," and the book, "The Relation between Science and Religion."

of the work that Combe was engaged in revising it for a new edition when he died. The fifth edition did not appear until 1872 but the book had then been long out of print.

Combe's labours in preparing "Science and Religion" had exhausted his strength, and about ten days after its completion a slight cold, caught when returning from a dinner party at Gorgie, completely prostrated him. Notwithstanding the frequent interruption of illness, his work during the last sixteen months of his life was prolific. In January 1857 he had written another article on the Currency question, which appeared in the *Scotsman* and in the tenth edition of his pamphlet on that subject. At Moor Park in July he began the revision of the "Constitution of Man" for his last edition, and the hundredth thousand of the English issues of that work was published a few months after his death. He had the satisfaction of receiving, in May 1858, a copy of an American edition for the blind, a large quarto volume of 250 pages and about five inches thick. It had been prepared under the direction of Dr Samuel G. Howe of the Perkins Institution and Massachusetts Asylum for the Blind, Boston, and in sending the book he wrote:—"I consider this edition of your great book to be the most valuable addition ever yet made to the library for the blind in any language. I have already had warm expressions of gratitude from intelligent blind persons for putting the 'Constitution' within their reach—gratitude and thanks which belong rather to you than to me."

In September 1857 Combe wrote his essay "On Teaching Physiology and its Applications in Common Schools." This was intended for the Social Science Association, was accepted by the Committee, and placed on the list of the Educational Section. Owing to Combe's infirm health, Mr T. H. Bastard was to read it for him, and proceeded to do so at the meeting of the Association at Birmingham in October. He was, however, interrupted by various frivolous objections from a clergyman, and was ultimately obliged to sit down without reading the

paper, as the chairman, Sir John S. Pakington, did not sustain his right to be heard. The paper was published as a pamphlet, with an introduction explaining the unfair treatment it had received from the members of the Social Science Association. Combe did this because a principle was involved which was of vital importance to the Association. In October, November, and December 1857, he wrote a series of articles for the *Scotsman* on the crisis in banking. In January 1858 he began his autobiography. In February the *Scotsman* contained his Correspondence with Mr Richard William Young* on "Our Rule in India," in which he applied the principles laid down in the "Constitution of Man" and "Science and Religion" to the existing state of affairs. He regarded the conquest of India as a blunder as well as a crime; and this was no new idea, for in 1847 he had in the "Constitution" expressed the hope that "before the close of another century the public mind of Great Britain will have made so great a progress in the knowledge of and belief in the moral order of God's providence, that it will compel her rulers either to relinquish that conquest as prejudicial equally to England and to India, or to administer it on the principles of morality for the benefit of the Indian people themselves." The people of the conquered country should have equal rights and equal rank with the English; he argued that if we were contented to act towards them on the principles of beneficence and justice "we might withdraw our armies, and enjoy all the profits of their commerce from the bonds of interest, respect, and affection which such conduct would evoke." That was written in 1847; the mutiny came as a sad proof of the necessity for the reforms he advocated, and his conclusions were:—

"All conquests that have ended in good have been those in which the dominant power laid aside its exclusive pretentions, and amalgamated with the vanquished, and raised all to equal rights. This was England's case after the Norman Conquest,

* Mr Young for several years administered a district in India, and was the author of "A few words on the Indian Question."

and Ireland, while ruled as a conquest, was a curse to England. India cannot be held by amalgamation, and in proportion as we enlighten and civilise the natives, we shall awaken their feelings of patriotism, deepen their sense of degradation, and prepare them for rebellion. Our rule, therefore, is an enterprise against nature, and no human power will suffice to bring fruits of peace, profit, and well-being, either to ourselves or to our conquered subjects, out of it. This is a terrible heresy, but I cannot help embracing it."

His last contributions to the press were a leader on the past and present condition of farming, and a sketch of the progress of the Irish National Schools, in the *Scotsman* of May, and a long letter on the question—"Why is a Free Government preferable to a Despotism or an Oligarchy," written for the *Manchester Examiner* on 5th June.

Phrenology was not now much talked of in public. The professional phrenologists were represented in America by Messrs Fowler and Wells, and in London by Charles Donovan, who occupied, in regard to the science, the position formerly held by Deville. In Edinburgh, the Phrenological Museum, with the extensive collection of casts and skulls, and the library which had been formed by the Society, was made over to the Henderson Trustees (1854), on condition that facilities should be afforded to those who desired to study the science, and that the public should be admitted free on certain days of the week. A new Phrenological Association had been formed, chiefly by working men, who met in the hall of the museum once a month, and Professor Hodgson delivered a course of lectures to them in 1855. In that year the Rev. H. W. Beecher publicly stated that the views of the human mind as revealed by Phrenology, were those which underlay his whole ministry.* Combe was rejoiced to learn in 1857

* "The *Washington Intelligencer* extracts the following passage from a sermon recently preached by the Rev. H. W. Beecher :—'And I may say here, what I have never said before in the pulpit, that the views of the human mind as they are revealed by Phrenology, are those views which have underlaid my whole ministry ; and if I have had any success in bringing the truths of the gospel to bear practically on the minds of men, any success in the vigorous

that in the new edition of the "Encyclopædia Britannica," Dr P. M. Roget's article on Phrenology, which had held its place now for forty years, and the appearance of which in 1817 had inspired his first defence of the science, was to be replaced by one written by Professor Laycock. The fact that a new article was considered necessary was the chief source of his satisfaction; he did not expect much advantage to Phrenology from the production of the new writer, who, in seeking Combe's co-operation, announced that he intended to bring out a new psychology of his own, and to avail himself of Phrenology in so far as it was true. This Combe regarded in much the same light as he would have done the announcement of a new system of Astronomy. The following extract from his reply to Professor Laycock will show why he was unable to co-operate with him :—

"Your application to me to write for you a representation of the principles of Phrenology as a science of mind, and its pretensions as an applied science or art, however respectful and friendly to me, appear to imply that you regard your own knowledge and experience on these topics as not complete. Your writings on the subject leave me in no doubt on this point. Your proposal that I should leave you 'to write, without interference, the estimate of its claims to acceptance,' therefore appears to imply a superiority of judgment on your part, which seems to me incompatible with your more limited knowledge and experience. I expect your estimate to differ widely from mine, and I should be precluded from endeavouring to do in your case what I did in that of Dr Roget, namely, show reasons for disputing the soundness of your judgment, as well as your competency, in your present state of knowledge, to decide on the question.

In the progress of Secular Education he had more cause for satisfaction than in the progress of Phrenology. Six Birkbeck

application of truths to the wants of the human soul, where they are most needed, I owe it to the clearness which I have gained from this science, and I could not ask for the members of my family, nor of a church, any better preparation for religious indoctrination than to put them in possession of such a practical knowledge of the human soul as is given by Phrenology.'"—From *The Critic*, 1st September 1855.

schools were doing good work in London; there were secular schools in Manchester and Salford; the Glasgow school had 230 pupils on its roll; and another school had been instituted in Leith by Mr James Hay, in the opening of which Combe had materially assisted, although it had been deemed prudent to conceal his name. To the last he cherished the hope of being able to find an efficient teacher to re-open the Williams school in Edinburgh, and he discussed the matter with Mr W. M. Williams when he visited him in Birmingham in 1857. In his excursions this year, he spent a month at Moor Park, and a fortnight with Mr Bastard at Charlton. In the room of a working-men's club, which, among other philanthropic schemes, Mr Bastard had established in the village, Combe improvised for about a dozen children the lesson in Physiology which is quoted in the pamphlet on the "Teaching of Physiology in Common Schools." In a rural village like Charlton the children had received little instruction that could have prepared them for his lesson; but by leading them from the simple question, "Did you get your breakfast to-day?" to the reasons why they took food, he was able to make them understand its effect upon the body; and then by showing them how food was produced and prepared, the necessity for labour, and the different value of the work done by the industrious and the idle labourer, he initiated them into the elementary principles of social economy. The conversational method of instruction, which he had learned from Mr William Ellis, arrested the attention of the children, and proved "the inherent interest possessed by things instituted by God when unfolded simply to the human faculties." He repeated this lesson with great success a few weeks later when he visited Belfast, in the school of the Rev. C. J. M'Alester, the Unitarian clergyman at Holywood. Before going to Belfast he had spent a week in Manchester, in order to see the Art Treasures Exhibition; by means of a wheel-chair he was

enabled to make the tour of the rooms, and to inspect the paintings with as little fatigue as possible.

The winter passed pleasantly, and with comparative freedom from illness. He paid occasional visits, and was hospitable as ever to his friends and to travellers. Amongst the latter were Charles Sumner, who was still suffering from the effects of the assault made on him at Washington after his famous Slave Abolition speech, and a friend of Horace Mann, Dr J. G. Holland, the poet and novelist. There was the usual family gathering in Melville Street at Christmas; and Combe's work and correspondence proceeded with that methodical regularity which, even in feeble health, enabled him to accomplish so much. The number of his old friends was rapidly decreasing. Dr Samuel Brown, whose letters on various religious questions appear in the appendix to "Science and Religion," had died in September 1856; and now in April 1858, Combe entered in his diary the death of Lord Dunfermline on the 17th; and on the 24th that of Professor William Gregory, who had been an early and zealous disciple of Phrenology. But the approach of death gave Combe no uneasiness. In May, when feeling much better than he had done at the same time in the previous year, he took Dr John Struthers, the present Professor of Anatomy, Aberdeen, and Robert Cox to the Phrenological Museum, and there gave them instructions for the post-mortem examination of his brain, with particular reference to a comparison with his brother Andrew's brain, in regard to the points in which they had differed mentally. "I have in this paid my last tribute to the cause of truth." Although not willing to undertake new tasks, he wrote to Mr G. W. Hastings, the Secretary of the Social Science Association, proposing to prepare a paper on the Physiology of the Brain for the next meeting, if it could be assured of a fair reception.

On the 3rd June the Combes travelled to York, rested

for the night, and proceeded next day to London, where they had engaged lodgings. There they remained three weeks, and received many visitors, among them John Bright, Cobden, Dr Lyon Playfair, Mr Robert Tait, whose picture of Mr and Mrs Carlyle at home they saw in the Academy, and Mr H. T. Buckle, whose "History of Civilization" afforded Combe many subjects of discussion with the author. "We parted very cordially," Combe says, "each persuaded that the other is a fanatic." He repeatedly mentions the kindness of Sir James Clark, and he had anxiously suggested to Lady Clark that materials should be collected for the biography of her husband. He regarded Sir James as a man who had been guided through life by a genius of benevolence, and thought that his great unseen influence on affairs and men should not pass unrecorded. "Since Dr A. Combe's death, Sir James is the friend who most thoroughly sympathises with my views and feelings, and I draw more completely to him than to any other man alive. We are of the same age: both born in 1788."

Combe was glad to escape from the bustle of London to his nephew's place at Kingston, where he rested for a fortnight. During his stay here (on the 8th July) he lunched with the Prince of Wales at the White Lodge, Richmond Park, and was rejoiced to observe the healthful development of His Royal Highness, whom he had last seen in 1853. "The Prince was frank, and cordially and naturally kind to me. He was intelligent and sensible in conversation; he told me of his travels in Germany, the Tyrol, and Switzerland, and discriminated well the differences of their peoples in dispositions and manners. He and I were left alone after lunch for ten minutes, and his whole manner and conversation were such as one would expect in a well-bred, well-conditioned young gentleman. He gave no indications of consciousness of superiority of rank; no condescension or make-believe politeness appeared, but a sincere kindness and directness that were very pleasing."

On the 10th July the Combes arrived at Moor Park, where they were to remain for a month previous to paying another visit to Mr Bastard at Charlton. The weather was fine, the place and its surroundings beautiful, and the society in the house agreeable. In pleasant drives, and quiet walks, reading and writing, the time passed with much enjoyment. On the 25th July Combe wrote: "This is my dear Cecy's birthday. She has completed her sixty-fourth year, and is vigorous and very handsome still. Her health is at present excellent; all her upper faculties are active; she is happy, and her affection towards me is overflowing. This gives me great pleasure, and our days pass like a melody sweetly played in tune! The evening was sunny after a blustering day, and Cecy and I walked into the glade. I found shelter from the wind under high ferns, and sat on the ground, she on her camp stool, and she sung to me several favourite songs, with the sweet tones and expression which no other voice has to me. God bless her, and long preserve her."

From the 26th to the end of the month he felt low and sleepless, but on the 2d August he inspected a school in the neighbourhood, and on the 3d drove to Waverley Abbey and through the grounds. On the 4th, Sir James and Lady Clark and Robert Cox visited him, and he had much conversation. During the night he wakened with a feeling of uneasiness in the chest, and in the morning suffered from a violent cough. On the 7th he felt quite well, and in the afternoon gave a lesson of an hour's duration to Dr Lane's children and others. He felt much excited, but took a slow walk, lay on the sofa all the evening, and went to bed apparently well. In the morning his pulse was 84, his stomach revolted at all food, and he was prostrate. On the 9th he was much better, and his appetite returned. It was decided to write to Mr Bastard, postponing the date of their visit to his place; but no one suspected that the end was so near. The account of the last few days is given in his own and Mrs Combe's words.

"*August* 10*th, Wind S.W., very warm, in evening thunder.* Pulse all night and all day 80, nausea continues, no appetite. Tea and beef-tea are taken; to-day I have been hot and thirsty, and drank cold water. I lay in bed and on the sofa all day. Very weak, not uneasy till to-day, when I have slight restlessness, and power of sleep is diminishing. Expectoration three times more than normal quantity. No pain in any vital organ, only heat and fuss in the head. Dr Lane is very kind, but says nature must best be left to work her own cure. Our visit to Mr Bastard is given up. I wrote fully to-day to Dr A. Cox."

The following was written by Mrs Combe to his dictation:—

"11*th. Wind south-west, very warm, thunder.* I was very feverish, hot, restless, and uncomfortable all last night; pulse 84 to 90. No remedy appeared to do any good; the only exception is that by dipping a cloth in cold water and putting it on the coronal region of the head the cerebral excitement was perceptibly diminished. I took last night a dose of senna and half a grey pill, and had two cups of beef-tea, not full, during the night. There was great shortness of breath; a very restless night. At 10 A.M. a telegram was despatched to Dr A. Cox, who arrived at 3 P.M. Weakness excessive. The doctor examined the whole region affected, and prescribed doses of the same medicine which he gave on 27th June 1857: port wine, beef-tea, with beat egg frequently to keep up the strength; also bran and mustard poultices over the right lung reaching to the spine. A restless night was passed, with occasional dozing; pulse not reduced.

"12*th. Wind S.W., very warm, thick atmosphere.* Pulse at 110 when Dr Cox went to Kingston. Linseed poultices applied all day and night. Very weak. Strong perspiration all day; food and wine as yesterday. A distressing day. Dr Cox returned at 9½ P.M.; ordered more nourishment. An effervescing draught with twelve drops of morphia as a sleeping draught. Cream relished. At 11½ slept till 1½; awoke and took a glass of port wine with a beat egg.

"13*th. Wind W., warm but clear.* Slept five hours tranquilly; felt relieved and more tranquil; pulse 105. Dr A. Cox left at 8 A.M.; food and wine as yesterday. At 12 hot and restless, with uneasy feelings. At 1 took a dose of senna and grey pill. Thunder these two evenings."

"He could dictate no longer, so I continue.—C. C.

"He had some disturbed sleep, but called three times for Steel; took food, wine, draught—all without benefit! Appetite fails, nausea increases, strength goes! Much distress of breath and restlessness; constant perspiration. At half-past 2 A.M. I went to him, fed him, tried to wash his face and hands, and heard the word 'darling;' but he grows indistinct, and the voice is low; left him—but returned at half-past 4. All the symptoms worse, one eyelid losing its power. Dr Cox came in at quarter past 7, and Dr Lane soon after. He said, 'from my present sensations, I should say I was dying—and I am glad of it.' Dr Cox said, 'all means must still be tried.' He went away as usual before 8, and said he should be down by the afternoon, and Robert also. He had two hours most distressing struggle for breath, the respiration becoming more laboured every minute. A glass of champagne was swallowed and retained, but a second nearly choked him—power of swallowing gone. Dr Lane raised him to drink, and while he was in that position, he opened his eyes *widely*, looked upwards, as if in adoration and with longing, for half a minute, then sank back, closed his eyes, grew marble white, the respiration became gradually slower, and in eight or nine minutes ceased, after two contractions of the jaws. Dr Lane said, 'it is over.' A profound stillness was in the room. In a few minutes the countenance took on a peaceful happy expression, the wrinkles vanished, the blood returned to the surface. I was taken away, and everything requisite was done. Then I returned and passed hours with his dear remains. No son could be kinder than Dr Lane has been; no friends more so than the whole family. At 3 P.M. Abram and Robert Cox came. They had no idea of the rapid change. We arranged plans. Dr Cox went up to London to try to get some one to make a cast, Robert to Farnham to make other arrangements; both were prompt and kind. Poor Robert, I am sure, regrets that he was not present at the last. He and I are to go to-morrow afternoon with the precious dead, so as to reach Edinburgh on Tuesday night. The funeral to be on Friday. All his wishes and directions will be faithfully carried out. The malady has been an attack of pleuro-pneumonia, probably aggravated by his going out in ungenial weather with it on him, in spite of entreaty, talking and exciting his brain, and failing at the last in digestive power, and thus not able to take requisite nourishment. They say the malady might have been overcome if the *system* had had power to rally. Twice they had great hopes, and ordered him not to rise in bed, but to keep his strength by

perfect stillness. In vain! he could not resist making efforts to help himself, and neither I nor our Steel could persuade him! It appeared to me and some others that the damps of death were long present. His extremities were perfectly cold for many, *many* hours, but I could not keep them covered! The weather was intensely warm. Just after he had been laid out, a peal of thunder broke over the house with a report like the roar of artillery! Then the air cleared, and to-day it was pleasant normal weather. CECILIA COMBE.

"MOOR PARK, *Sunday, August 15th.*"

Combe was buried in the Dean Cemetery, Edinburgh, in the grave he had bought in 1850. Mrs Combe survived him nearly ten years, residing during the greater part of that period on the Continent. She died at Nice on the 19th February 1868. Her remains were placed beside those of her husband as he had wished. A simple head-stone, with a medallion portrait of Combe, marks the grave, and a granite tablet bears this inscription:—

IN MEMORY OF

GEORGE COMBE,

AUTHOR OF "THE CONSTITUTION OF MAN,"

*Born 21st October* 1788. *Died 14th August* 1858.

AND OF

CECILIA SIDDONS,

HIS WIFE,

*Born 5th July* 1794. *Died 19th February* 1868.

# CHAPTER XII.

PORTRAITS—PERSONAL APPEARANCE AND CHARACTER DESCRIBED BY SIR JAMES COXE—REMINISCENCES OF MRS COMBE—DEVELOPMENT—LETTER TO VON STRUVE—HIS CHARACTER DESCRIBED BY HIMSELF—STUDY—METHOD OF COMPOSITION—DEVOTION TO PHRENOLOGY—MOTIVES OF ACTION—FACULTIES INFLUENCING RELIGIOUS SENTIMENTS—EARLY INFLUENCES AND ULTIMATE CONVICTIONS—HABITS OF ECONOMY—THE LOVE OF LIFE FEEBLE—READING AND COMPOSITION.

Two Presidents of the Royal Scottish Academy painted Combe's portrait at two distant periods of his life—Sir Daniel Macnee in 1836, and Sir John Watson Gordon in 1857. The latter portrait was the gift of his nephews—John, Robert, James, and Abram Cox, and his niece, Robina Cox (Mrs Ivory), as a testimonial of their gratitude for his management of their affairs, and direction of their education from the death of their father in 1815 until the expiry of the trust in 1836, when Dr Abram Cox attained his majority. The medallion for the tombstone, by William Brodie, R.S.A., was executed shortly after Combe's death, and the sculptor's personal acquaintance with his subject enabled him to produce a faithful likeness. The following description of Combe's character and personal appearance is written by his nephew, Sir James Coxe:—

"My early recollections of the personal appearance of George Combe are those of a sedate man, always wearing black clothes, the coat with swallow tails, and the trousers a good deal creased at the knees, whereby they were rather shortened, displaying too much of his black gaiters. His

neckcloth was always a white one, and his hair, already grey, was kept closely cropped. Altogether there was a professional look about him, which might be that of a lawyer, or a dissenting clergyman. After his marriage, his general appearance underwent a great modification. His dress was modernised; surtouts, usually blue, replaced the old swallow tail coat, his trousers were better made, the gaiters were discarded, and black ties or neckerchiefs replaced the white neckcloths. His hair was allowed to grow to a considerable length, and was combed out at the sides. The professional aspect thus disappeared, and that of a well-dressed gentleman, 'unattached,' took its place. In his later years Mr Combe had a good deal of a stoop, and used a stick in walking. He never wore whiskers, and kept his face always closely shaved.

"My uncle possessed a very even temper. I do not recollect ever seeing him in a passion, or hearing him use an oath. In his youth, and indeed throughout the whole of his life, he had great enjoyment in the beauties of nature; and at a time when his professional income could yet be but moderate, he kept a 'Shandridan,' in which he and his brothers, and other relatives, were in the habit of taking evening drives during the summer in the beautiful country surrounding Edinburgh, and occasionally making excursions of some length. Although formal in his manner, my uncle had large sympathies both with children and adults. To his nephews and nieces he was always ready with treats and tips, and they could reckon with confidence on their new-year's festivities, and the accompanying 'hansel.' To persons who stood in need of pecuniary assistance, especially if they had any claim on him through blood or friendship, he was generally ready to lend a helping hand; but as he seldom failed at the same time to point a moral in very plain language, the gratitude of the recipient was somewhat impaired. Indeed, his power of giving wholesome advice, and telling wholesome truths in a plain and emphatic way, was throughout life a

characteristic feature of his nature, and in the boyhood of his nephews he was the bugaboo, who was called in to keep them in order. To be reported to 'Uncle George' involved an ordeal from which they were all desirous of escaping, although they knew that a lecture on their bad behaviour, and an uninviting picture of their future career, would be the only result which would follow. Even in his own domestic circle, his formality was such that he was usually designated 'Mr Combe,' although his irreverent nephews did not hesitate to address him as 'the phrenologist,' or 'Logos,' or 'Jokeum,' the last being a travestie of his usual signature—Geo. Combe. This formality, however, had in it nothing of haughtiness or proud reserve, for he was fond of fun, and took great delight in being carried about the grounds at Gorgie by his nephews on their crossed hands, being rowed by them in a boat on the mill-dam, or being sent flying backwards and forwards on a swing. At one time he took to practice pistol-firing, and with Lawrence Macdonald and some other friends was in the habit of trying his skill on the trees at Gorgie, considerably to their damage. I think this must have been about the time when Charles Maclaren went forth to fight his duel with Peterkin. After this duel it was for many a day a standing joke with Mr Combe and his friends that although neither combatant hit his man, yet that one or other of them had been guilty of the death of an innocent sheep.

"My uncle had strong family attachments, and kept up relations with all his kith and kin. In his latter years it was his habit to have all the near members of the family dining with him on Christmas Day, and he kept up this custom when it would have been more prudent for him to have avoided the exertion it involved. In general social intercourse he had great pleasure, and particularly enjoyed the society of intimate friends, and also of strangers who manifested any interest in questions affecting the welfare of mankind. To young men who gave promise of a useful career he

was always disposed to be kind and helpful, and it was a great pleasure to him to receive them at his house, and help them on in society. Perhaps his most prominent mental characteristics were a detestation of all shams, a craving for truth, and a love of justice; and it was in opposition to injustice and oppression in all their forms that he became combative and resistant. With a strong desire for posthumous fame, he was not, in a worldly sense, ambitious. This was shown by his early purchase of the small house in Hermitage Place, Stockbridge, under the belief that it was to be his permanent residence through life. Though constantly bearing death in mind, he was entirely free from gloom; and in the endeavour to fulfil worthily his mission upon earth, he reposed in thorough confidence on the justice and beneficence of the great Creator."

Mrs Combe cherished the idea of seeing her husband's biography written; and during her residence at Frankfort-on-Maine, in 1862, she wrote and printed sixteen pages which were intended to form an introduction to the work. The following extracts contain the personal reminiscences she recorded:—

"George Combe was nearly forty-five years of age when I first saw him in Edinburgh in the autumn of 1832. In person he was fully, or rather above, the average height, very slender, and with a slight stoop, and hair already grey. The general expression of his countenance was grave and earnest, although the features, which at first sight offered nothing striking, were capable of conveying the benevolence as well as the love of drollery, no less than the searching penetration and the occasional sternness from which I have seen the conscious offender turn away. His high and arched forehead gave token to the understanding eye of those qualities which may be said to have left their mark on the age. His ordinary manner and language were plain and direct, occasionally rising with the subject to a higher style, and his Scotch accent, after the ear became used to it, seemed the appropriate medium for conveying thoughts so serious and weighty as those to which it often gave utterance. Indeed, though he often regretted no one had

corrected its broadness in his youth, I think few persons would have wished either words or pronunciation altered at the time I write of. His deficiency of musical ear sometimes gave a monotony to his voice, which was besides not of a resonant quality; yet it was remarkable that in addressing large audiences he could be easily heard even in halls and churches very deficient in construction for sound, and this without fatigue, at a sustained pitch, and for a considerable time. I recollect that the first time I was in his company at a dinner party, where he, his brother Andrew Combe, and Lawrence Macdonald, the sculptor, were conversing, I had great difficulty in following the discourse, so different did the Edinburgh accent sound from the Highland Scotch I had previously heard.

"There are many still living who could testify to his extraordinary penetration into character. It seems much to assert that, in the twenty-six years of our intercourse, I knew of only two instances in which time and opportunity caused him to revise his judgment; and of a third, in which I feel sure that there would have been a revision, had he lived to know what I now know. In every other case in which character came under his observation, time only confirmed his first impressions, so that it has been said of him, in the words of Othello, that he 'was a charmer, and could almost read the thoughts of people.' The judgments that he passed were always just, however his benevolence might seek to render them indulgent. He could measure and weigh the motives which inspired others, their proclivities and their lights; all good impulses were appreciated, while no faulty ones could escape his notice. His friends used in sport to say, that rather than not have a 'complete view,' as they called it, he would make the most of a subject by synthetically erecting a system of probabilities which, as often as not, turned out to be facts.

"Not less prominent than his perspicacity was his overruling sentiment of justice. If he was ever severe, it was when this sentiment was aggrieved, no matter by whom or what; and not till the latter years of his life had he brought his feelings and his judgment into such exact accordance, that he could refrain from revolting openly against an act of gross injustice, by the consideration that resistance to it was vain. Another remarkable way in which his sagacity showed itself, was his perseverance in a course just as long as his judgment saw it to be possibly achievable, and the exactly fitting moment at which he ceased to pursue it, when reason told him it was unattainable, or pointed out another preferable

path. In such a character we should expect to find that virtue, which by some is classed among the minor ones,—the love of order; and not only did he love and practice a scrupulous exactness in this respect, but he considered habits of order to be more closely allied to conscientiousness than the world in general recognises them to be.

"The confidence in his knowledge, as well as in his benevolence, was so general, that during the many years we lived together, few months, or even weeks, passed in which persons in perplexity and mental discomfort of every shade, from mere indecision to the most pitiable states of alienation, did not come to him for counsel. Often these were friends and acquaintances, but not seldom strangers from a distance applied for his advice, and carried away benefit which testified to the impression produced by his published works of the strength of his judgment and the kindness of his heart.

"Of all the men I have known, he was almost the least a servant of habit, and the openest to adapt himself to altering or to new circumstances. As in the course of years those circumstances necessarily changed, they always found him ready to accept what seemed to him good and fitting for the day and hour, and to throw aside what had served a former purpose if it appeared now effete and useless. On his domestic qualities —on that union of manliness with gentleness—that equableness of temper which made hourly intercourse with him a joy —that never failing kind interest and assistance given when asked, but never interfering with or seeking to control free action—the moral support of his wise experience in those difficulties which occur in every household—on all this, and much more, I do not suffer myself to dwell.

"Steadfast in friendship where he had once given his regard, he was ever slow to imagine a possible change in others which was unknown in himself; and I have more than once wondered at the length of time it took to let him see the inconstancy of those who fell off from him when the declaring of his opinions turned the tide of popularity against him!

"The last letter he ever wrote (from that bed which was his last resting-place while living) was one of the clearest expositions of some of his own principles. The last letter of all, dictated to me after he lost power to hold the pen, was an act of benevolence; and his last look and attitude were those of humble and complete reliance on the goodness of that great Power to whose service his existence had been devoted. To have witnessed such a close of such an existence was to be penetrated with respect for the faith of such a man."

In his comments on the development, drawn up by Gustav von Struve at Mannheim, in 1845, (see page 208 of this volume), Combe has supplied a remarkable exposition of his own character. The following is a translation of the development :—

Temperament: nervous-bilious. Predominant Region: Intellectual and Moral Power.

Scale:—Very small, 1; small, 2; moderate, 3; rather large, 4; large, 5; very large, 6.

I. *Propensities Common to Man and Animals.*

| | |
|---|---|
| 1. Amativeness, | 2½ |
| 2. Philoprogenitiveness, | 2 |
| 3. Concentrativeness, | 5 |
| 4. Adhesiveness, | 4½ |
| 5. Combativeness, | 3 |
| 6. Destructiveness, | 4½ |
| 6*a*. Alimentiveness, | 2½ |
| 7. Secretiveness, | 4 |
| 8. Acquisitiveness, | 4½ |
| 9. Constructiveness, | 3 |
| 10. Self-esteem, | 5 |
| 11. Love of Approbation, | 5 |
| 12. Cautiousness, | 5 |

II. *Moral Sentiments.*

| | |
|---|---|
| 13. Benevolence, | 6 |
| 14. Veneration, | 3 |
| 15. Firmness, | 5 |
| 16. Conscientiousness, | 5½ |
| 17. Hope, | 3½ |
| 18. Wonder, | 4½ |
| 19. Ideality, | 4 |
| 20. Wit, | 3 |
| 21. Imitation, | 3 |

III. *Intellectual Faculties—Perceptive.*

| | |
|---|---|
| 22. Individuality, | 3½ |
| 23. Form, | 3½ |
| 24. Size, | 3½ |
| 25. Weight, | 3½ |
| 26. Colouring, | 3 |
| 27. Locality, | 4 |
| 28. Number, | 2½ |
| 29. Order, | 4½ |
| 30. Eventuality, | 4 |
| 31. Time, | 4 |
| 32. Tune, | 3 |
| 33. Language, | 4 |

*Reflective.*

| | |
|---|---|
| 34. Comparison, | 5½ |
| 35. Causality, | 5¼ |

The remarks which accompanied this development drew attention to the contrasts it indicated in the character, to the large organs of Concentrativeness, Eventuality, Comparison, and Causality, and to the powerful influence exercised by Benevolence, Self-esteem, and Love of Approbation. The following is Combe's letter to Von Struve :—

"EDINBURGH, 21*st October* 1845.

"MY DEAR SIR,—I have read with attention your Phrenological analysis of my natural dispositions and talents, and

consider it due equally to you and to Phrenology to state my remarks on it with clearness, openness, and truth.

"I have during my whole life been conscious of great attachment to the female sex, without either the sexual passion or the love of children being strong. I should consider the former to possess in my mind about or a little below the average degree of strength in which it exists in men in general, but the latter to be certainly deficient. While the sexual passion, without ever assuming the supremacy, has always made itself felt as an active influence, the love of or desire for children has at no period of life possessed this character. I take no purely philoprogenitive pleasure in children. They are objects of my Benevolence, but as they are too feeble and unintelligent to render it possible for me to do them any good, they excite little interest. I am deficient also in the natural language of philoprogenitiveness, and cannot inspire little children with any liking for me. I am married and have no family, but have never on this account experienced disappointment. Those remarks, however, apply only to infants. When children become intelligent they address themselves to Adhesiveness, Benevolence, and other of the moral sentiments, besides affording scope for the exercise of the intellectual faculties, and I have experienced much interest in them when at this stage of their progress. There are now around me men and women on whose devotion and attachment I could rely as securely as if they were my own offspring, whose opening intellects and expanding sentiments I bound to myself by the cords of affection and respect twenty years ago when they were in the dawn of youth.

"I have said that I have always been conscious of great attachment to the female sex. I ascribe this feeling in a great degree to Adhesiveness, and the moral faculties; but judging from my own consciousness I am disposed to admit the existence also of an organ of attachment for life as described by Dr Vimont. I find in the female mind, when of a high order, a depth of attachment, a disinterested sense of devotion, a purity and goodness which take possession of my sympathies, but there is a feeling superadded which seems to bind me in indissoluble union. This feeling of attachment was familiar to my mind before the sexual passion was developed, and it continues unaffected by its decay.

"From infancy to the present day, Alimentiveness has served chiefly as a motive to nutrition. I have always preferred simple food, and in moderate quantities, and not only never was intoxicated, but am constitutionally incapable of

being so. My stomach revolts against wine or any other alcoholic liquor long before my brain is affected by it. I have in consequence been habitually temperate without the slightest merit. The temptations of the table, to many so formidable, are to me nearly unknown. Your remark on the large development of Concentrativeness is correct. I am conscious of the power of concentrating my faculties on one object. Born without fortune, and forced to make continually discursive efforts in the profession of the law, I had little leisure until nearly fifty years of age for the systematic pursuit of literature and science. My hours of study were not stolen from sleep, they were found while dressing in the morning, or walking before dinner for exercise. During the time thus employed I thought as much as sufficed me for hours of writing as rapidly as the hand could move the pen. The daily incidents of life supplied me with facts and opportunities of observation. I never studied a plan of an essay or a book; the ideas arranged themselves spontaneously in the best order which I was capable of attaining, and I wrote them as they came. I saw the beginning, the middle, and the end of my subject without an effort. These traits I ascribe to Concentrativeness large, acting along with a pretty equable combination of the other organs. This talent must not be confounded with the tendency to dwell only on one idea. My objects of thought were numerous and varied, and I could pass with ease from one of them to another, each for the time occupying my whole attention. The description which you give of the earnestness and determination of my natural character is correct. This is so well known that I need not enlarge on it, but I may add that in hours of relaxation I was, and still am, fond of ingenious trifling, although certainly the bent of my mind is towards serious pursuits. You advert to the powerful influence of Benevolence, Self-esteem, and Love of Approbation, on my character. When yet a child I was animated by the strongest ambition to do some great and good service to my fellowmen, which should render me an object of their love and respect. I conjured up schemes in my imagination for the gratification of the desire until I wept in contemplating them. These were the mere dreams of childhood, but I owe to Phrenology, presented to me by mere accident, a field in which it has been possible for me to pursue this object, modified by the sober light of time, and rendered more pure by the other moral sentiments and a riper judgment.

"Phrenology was a subject peculiarly well fitted to my

combination of faculties. In its great facts it combined the certainty of physical, with the deep interest of moral science; it was capable of the most extensive and beneficial practical application; it was despised, calumniated, and rejected by the great in literature and science, and converted into a laughing-stock by the public at large. Its truth and utility captivated my Benevolence, Conscientiousness, and Intellect; the injustice perpetrated against Drs Gall and Spurzheim roused my indignation, and I entered the field with every faculty enlisted in the cause. I was thirty-one years of age when I published the "Essays on Phrenology," the first defence of the doctrine bearing my name. I was then rising into practice in my profession, but altogether unknown in the walks of literature. The general opinion expressed on the appearance of the book was, that I was labouring under a degree of error and enthusiasm nearly amounting to monomania, and professional ruin was prophesied as my reward. These predictions, however, were not realized. I re-studied the great institutional works on the law, so as to be armed at every point, and endeavoured to discharge all the duties of my profession with increased care and zeal. The result was that I lost no client by my philosophy, but gained several, who were attracted by the mental qualities displayed in the Essays. This occurred in 1819, and for more than twenty years subsequent to that date a constant warfare was maintained against Phrenology by the press, in which I stood forward as one of its defenders. Ridicule, argument, abuse, and religious denunciations were all employed in order to extinguish the science, but in vain. Far from repining under these assaults, or shrinking from their consequences, I have lived serenely and happily through them all. The profound conviction that on the one side were the eternal truths of nature, and on the other the weakness of erring humanity never left me in one moment's doubt as to the ultimate triumph of the cause. I say this in regard only to the great principles and facts of Phrenology. The deductions drawn from them, and the applications made of them, I freely left to the appreciation of every reader.

"It would be an error to suppose that in these contests, so far as maintained by me, I was sustained by purely moral motives alone. While Benevolence, Conscientiousness, and Intellect were the springs and the directing powers of my actions, Combativeness, Destructiveness, Self-Esteem, Love of Approbation, and Firmness also found direct gratification in them, and rendered them agreeable. I never knew fear, because when convinced that I was in the wrong, I was not

ashamed to avow error; and when conscious of being in the right, I rejoiced in the strife. When ridicule was directed by an opponent against propositions which were true, but which he ignorantly treated as false—and this was often the case—I perceived the absurdity of his own position, and laughed *at him*, when he imagined that he was overwhelming me with his satire. I mention these facts, because although trivial in themselves, they illustrate the part which the propensities and inferior sentiments play, even in contests that are in their objects moral. Without the endowment of Combativeness, Destructiveness, Self-Esteem, Love of Approbation, and Firmness, which you will find in my head, I could not have acted as I have done. In reference to the same faculties, it is due to truth to add, also, that I am deeply conscious that there have been too many occasions in my life on which they have escaped from under the control of the higher faculties, and have produced severity of temper, vanity, egotism, and pride. These errors and imperfections I acknowledge, lament, and try to avoid; and if I have any consolation in reflecting on them, it is found in the hope that they have diminished as I have become older, and that Phrenology, by exhibiting the character of the feelings emanating from these sources, and the extent to which I possessed them, has been essentially useful in enabling me to control and direct them.

"You do not advert to the influence of Hope, Veneration, and Wonder, in producing or modifying my religious sentiments. I was educated in rigid Calvinism, and sincerely embraced it, so far as my nature was capable of doing so. In boyhood, it appeared to me to embody into a system not only sound interpretations of scripture, but the undeniable facts of nature. The human mind seemed to me then to be fundamentally vicious in its desires and perverted in its powers, and all nature seemed to labour under the malediction of the Divine Being. These opinions, however, while they appeared to me to be true, were never congenial to my nature, and caused me great uneasiness. I felt an internal revulsion against them, which I ascribed to the corruption of my own nature. The doctrine of Election, and the pre-ordained damnation of countless millions of my fellow creatures, shocked my Benevolence and Conscientiousness; while the converse idea that certain individuals were chosen from all eternity to inherit everlasting felicity, seemed necessarily to imply favouritism and partiality in the Deity. My sense of justice never permitted me to place myself among the elect: on the contrary, my consciousness that I was no better than

my fellowmen, joined with belief that few will be saved, led me to place myself among those who are destined to be condemned. The doctrine of vicarious punishment gave me no relief, although intellectually believed. It appeared in its very conception to involve injustice, and never removed the difficulties attending the predestined rejection of particular individuals. My own rejection was an abiding conviction, and often did I wish that I had never been born. I envied the horses and the sheep that had no souls, and wished that I could cease to exist when I ceased to breathe. Death was then very terrible in my eyes, as the grand step from sin and sorrow here into indescribable misery hereafter. After I became acquainted with the great facts in regard to the extent and constitution of the universe, and the uniformity of the laws by which its phenomena are regulated, as these are disclosed by the sciences of Astronomy, Geology, Chemistry, Anatomy, and Physiology, the cloud of superstition under which I had been educated gradually dissolved, and Phrenology, by unfolding the sources of many of the errors of Calvinism which appear like truth, aided the process of emancipation. The same deep interest in religious sentiments continue, but now the dictates of my moral faculties harmonise with those of my intellect, and I am convinced that this world and the human mind have been constituted on the principles of benevolence and justice, and that a far more direct and beneficent government is exercised by the Divine mind over them both by means of natural laws than is generally believed. In my books on the "Constitution of Man" and "Moral Philosophy," I gave expression, as far as the state of public opinion in this country would permit, to my new convictions.

"Another point which you have omitted to notice, is the effect of Acquisitiveness, combined with Self-Esteem, Cautiousness, Conscientiousness, and Intellect in my dispositions in regard to property. I inherit from both my father and mother an instinctive abhorrence of debt. I have never in any year spent more money than I earned. I have always appreciated the value of property as a means of usefulness and independence; but money-making has never been with me the object of life. As soon as I had acquired capital sufficient to enable me to continue to live in the same social circumstances in which I had been accustomed to move, I relinquished my professional pursuits, and with them the income which they produced, and devoted my time exclusively to Philosophy. I am now in possession of a moderate independence, neither rich nor poor, but undisturbed by anxieties about wealth, and I

devote my declining years to the advancement of the cause which formed the grand interest of my vigorous days.

"My feelings in regard to debt may, I think, be correctly traced to Self-esteem taking its direction from Conscientiousness. From infancy I have instinctively regarded the payment of sums justly due as a moral obligation, and Self-esteem gave me the feeling that it would be highly degrading to fail in fulfilling it. I do not, therefore, use too strong an expression in saying that I have always had an abhorrence of debt. Intellect and Cautiousness were consequently kept constantly on the watch to avoid every engagement that could have brought me within the risk of insolvency, and my independence has arisen from conservative acts of prudence more than from the direct pursuit of wealth.

"The organ of the Love of Life is one still involved in a considerable degree of uncertainty. It should be small in my brain, for since I escaped from the terror of endless misery, I not only have no dread of death, but do not feel that the prospect of its approach lessens a single enjoyment of life. I experience no need of the assurance of immortality to give zest to existence here. I have the most perfect confidence in the benevolence and justice of the Divine Being, and tranquilly rest in the belief that at death He will dispose of me in such a manner as His unbounded wisdom sees best. I consider myself as living now in His presence, and governed by His laws, and I do not anticipate that in any other world I should find Him manifesting a character different from that which He exhibits here, and this character inspires me with unlimited confidence and love.

"In regard to my intellectual powers, a few explanations may be interesting. When a boy, I never could learn arithmetic. At the end of five years of teaching I could not subtract, divide, or multiply any considerable number of figures with accuracy and facility, and cannot now do so. This has not been owing to want of practice, for during thirty years I was constantly called on in my profession to deal with figures, to prepare and analyse accounts. I mastered everything connected with them except the arithmetical calculations, and to perform them I was forced to employ clerks. At the present day I cannot sum a column of figures correctly. I recollect well that when at school arithmetic and algebra appeared to me to be impenetrable mysteries, and I often wondered why, in regard to them, I was so inferior to other boys whom I equalled in other branches of education. It was only when in 1816 I became acquainted with Phreno-

logy that the cause became apparent; the organ of Number in my head was seen to be very deficient. In geometry I was more successful; and in studying Euclid, many of the propositions appeared to me to be such self-evident truths, that no demonstration could add to their certainty. What was called the demonstration appeared to be only a statement of relations and proportions which must be perceived to be true as soon as distinctly propounded. I never pursued this branch of science, however, beyond its elements, and, although alive to the importance of algebra and arithmetic, it is probable, that, owing to the deficiency of my organ of number, I was really incapable of advancing far in Mathematical Science.

"The organ of tune also is deficient in my brain, and although I have a perception of melody in my ears, I have no memory of musical sounds. I never could reproduce even the simplest tune which I had heard. When a tune which I have often heard is played again, I recognize it, and I know when it is well or ill played. I am able also to analyse to some extent the qualities of musical composition, and to perceive the connection of the style of each composer, with his particular combinations of mental organs, and I have succeeded in rendering this connection clear to individuals highly endowed with musical talent. In the organ of Imitation also I am deficient, and possess scarcely any appreciable active degree of the talent. From this defect I cannot give expression or produce resemblances in drawing. I cannot mimic any one, and in learning languages, find it extremely difficult to catch the manner and idiom of the people to whom they belong. Nevertheless, I have enough of this organ to be able to appreciate impressions made upon it; I understand expression, and can analyse the elements which enter into its composition, when these are presented to my observation in living beings or works of art.

"The organs of Form, Size, Colouring, and Individuality are not more than moderately developed in my head, and enjoy only a corresponding degree of power in the faculties. Before I applied seriously to the practical study of Phrenology, all heads appeared to me to be so nearly alike that I despaired of ever being able to distinguish the size of individual organs. Practice, however, educated these moderately developed organs into a state of increased activity, attended by increased perception; and although much inferior to Dr Spurzheim as an observer, I became capable of estimating magnitudes and distinguishing differences, which at first I could scarcely recognize.

"I need not dwell on my organs of Eventuality, Causality, and Comparison, because you have correctly estimated their size, and the manifestations of them are before the world, who can judge for themselves. In concluding this sketch two remarks remain to be made. From my earliest years to the present time, the act of reading, if continued uninterruptedly for more than an hour, has lowered the action of the heart, and diminished digestion and secretion. If long persevered in, it resulted in failure in the power of attention. The act of original composition, on the other hand, produced opposite effects. It increased the action of the heart, quickened the circulation, promoted digestion and all the secretions, and gave alacrity and vigour to the whole corporal frame, and it could be maintained for three, four, or five hours in succession without fatigue. I have never discovered any satisfactory explanation of this peculiarity, unless it be that, owing to the organs of Individuality, Form, and Imitation, which embrace other men's ideas and feelings, being small or moderately developed, reading necessarily addressed itself to and strained the weakest powers; while original composition, proceeding chiefly from the larger organs, and the moral and reflecting faculties, was an exercise of the more vigorous portions of the brain, and therefore more calculated to rouse the corporal system into action. Whatever the cause may be, this fact taken in connection with the inferiority in size of many of the knowing to the reflecting organs in my brain, is in harmony with an observation that has often been made by my friends,—that I am a better teacher than a learner.

"In writing this detailed description of myself, I may be thought by some to be indulging in the weakness of vanity and egotism, but I have a higher motive. I wish to present a record of my own natural dispositions and powers, along with your estimate of the development of the brain, to enable those who take an interest in Phrenology to judge of their harmony or discord. In order to avoid as much as possible the misleading influence of egotism, I have submitted this sketch to the scrutiny of the two persons in the world who know me best, my brother, Dr A. Combe, and my wife, and it has received every correction and modification which their judgment could supply.

"I remain, my dear Sir, yours very sincerely,

"GEO. COMBE."

THE END.

# APPENDIX.

## No. I.

The following measurements of George Combe's head were taken by William Brodie, Esq., R.S.A., Sculptor, and Arthur Mitchell, Esq., M.D. :—

### DIMENSIONS OF THE SKULL.

Tape measurements :

Greatest circumference, $21\frac{3}{4}$ inches.
From occipital spine to top of nasal bone, over the vertex, $13\frac{7}{8}$.
„ ear to ear, over the vertex, $12\frac{5}{8}$.

Calliper measurements :

From Philoprogenitiveness to Individuality, 7·70.
„ Concentrativeness to Comparison, 7.
„ Ear to Philoprogenitiveness, 4·30 on right side ; 4·50 on left.
„ Ear to Individuality, 4·85.
„ „ to Benevolence, 5·10.
„ „ to Firmness, 5 on right side ; 5·10 on left.
„ „ to root of nose, 4·70 on right side ; 4·50 on left.
„ Destructiveness to Destructiveness, 5·60.
„ Secretiveness to Secretiveness, 5·20.
„ Cautiousness to Cautiousness, 5·35.
„ Ideality to Ideality, 4·50.
„ Constructiveness to Constructiveness, 4·90.
„ Mastoid Process to Mastoid Process, 4·70.

## No. II.

BRIEF OUTLINE OF THE PHRENOLOGICAL FACULTIES, WITH THEIR USES AND ABUSES, BY GEORGE COMBE.

### Order I. FEELINGS.

Genus I. PROPENSITIES—*Common to Man with the Lower Animals.*

THE LOVE OF LIFE.—The organ lies before and a little below Destructiveness. Its situation is not indicated by a number on the bust.—*Uses:* It gives the love of life, and instinct of self-preservation. Combined with Hope, it desires to live for ever.—*Abuses:* Excessive love of life. When it is very largely developed and combined with Cautiousness large, it gives an anxious dread of death.

1. AMATIVENESS.—*Uses:* It produces love between the sexes: Marriage springs from Amativeness, Philoprogenitiveness, and Adhesiveness, acting in combination.—*Abuses:* Promiscuous intercourse with the opposite sex; seduction; marriage with near relations; marriage while labouring under any general debility or serious disease; marriage without possessing the means of maintaining and educating a family.
2. PHILOPROGENITIVENESS.—*Uses:* Affection for young and tender beings.—*Abuses:* Pampering and spoiling children.
3. CONCENTRATIVENESS.—*Uses:* It concentrates and renders permanent emotions and ideas in the mind.—*Abuses:* Morbid dwelling on internal emotions and ideas, to the neglect of external impressions.

3*a*. INHABITIVENESS.—*Uses:* It produces the desire of permanence in place.—*Abuses:* Aversion to move abroad.

4. ADHESIVENESS.—*Uses:* Attachment: friendship and society result from it.—*Abuses:* Clanship for improper objects, attachment to worthless individuals. It is generally strong in women.
5. COMBATIVENESS.—*Uses:* Courage to meet danger and overcome difficulties; tendency to defend, to oppose and attack, and to resist unjust encroachments.—*Abuses:* Love of Contention, and tendency to provoke and assault. This feeling obviously adapts man to a world in which danger and difficulty abound.

6. DESTRUCTIVENESS.—*Uses:* Desire to destroy noxious objects, animate and inanimate, and to use for food animals in which life has been destroyed.—*Abuses:* Cruelty, murder, desire to torment, tendency to passion, rage, and harshness and severity in speech and writing. This feeling places man in harmony with death and destruction, which are woven into the system of sublunary creation.

6*a*. ALIMENTIVENESS: APPETITE FOR FOOD.—*Uses:* Nutrition.—*Abuses:* Gluttony and drunkenness.

7. SECRETIVENESS.—*Uses:* Tendency to restrain within the mind the various emotions and ideas that involuntarily present themselves, until the judgment has approved of giving them utterance; it is simply the propensity to conceal, and is an ingredient in prudence.—*Abuses:* Cunning, deceit, duplicity, and lying.

8. ACQUISITIVENESS.—*Uses:* Desire to possess, and tendency to accumulate; the sense of property springs from it.—*Abuses:* Inordinate desire of property, selfishness, avarice, theft.

9. CONSTRUCTIVENESS.—*Uses:* Desire to build and construct works of art.—*Abuses:* Construction of engines to injure or destroy, and fabrication of objects to deceive mankind.

## Genus II. SENTIMENTS.

### 1. *Sentiments common to Man with some of the Lower Animals.*

10. SELF-ESTEEM.—*Uses:* Self-respect, self-interest, love of independence, personal dignity.—*Abuses:* Pride, disdain, overweening conceit, excessive selfishness, love of dominion.

11. LOVE OF APPROBATION.—*Uses:*—Desire of the esteem of others, love of praise, desire of fame or glory.—*Abuses:* Vanity, ambition, thirst for praise independently of praiseworthiness.

12. CAUTIOUSNESS.—*Uses:* It gives origin to the sentiment of fear, the desire to shun danger, and circumspection; and it is an ingredient in prudence. The sense of security springs from its gratification.—*Abuses:* Excessive timidity, poltroonery, unfounded apprehensions, despondency, melancholy.

13. BENEVOLENCE.—*Uses:* Desire of the happiness of others, compassion for the distressed, universal charity, mildness of disposition, and a lively sympathy with the enjoyment of all

animated beings.—*Abuses:* Profusion, injurious indulgence of the appetites and fancies of others, prodigality, facility of temper.

2. *Sentiments proper to Man.*

14. Veneration.—*Uses:* Tendency to venerate or respect whatever is great and good; it gives origin to religious emotion.—*Abuses:* Senseless respect for unworthy objects consecrated by time or situation, love of antiquated customs, abject subserviency to persons in authority, superstitious awe. To these Mr Scott adds, "undue deference to the opinions and reasonings of men who are fallible like ourselves; the worship of false gods, polytheism, paganism, idolatry."

15. Firmness.—*Uses:* Determination, perseverance, steadiness of purpose.—*Abuses:* Stubbornness, infatuation, tenacity in evil.

16. Conscientiousness.—*Uses:* It gives origin to the sentiment of justice, a respect for rights, openness to conviction, the love of truth.—*Abuses:* Scrupulous adherence to noxious principles when ignorantly embraced, excessive refinement in the views of duty and obligation, excess in remorse or self-condemnation.

17. Hope.—*Uses:* Tendency to expect future good; it cherishes faith.—*Abuses:* Credulity with respect to the attainment of what is desired, absurd expectations of felicity not founded on reason.

18. Wonder.—*Uses:* The desire of novelty; admiration of the new, the unexpected, the grand, the wonderful, and extraordinary.—*Abuses:* Love of the marvellous and occult; senseless astonishment; belief in false miracles, in prodigies, magic, ghosts, and other supernatural absurdities.—*Note.* Veneration, Hope, and Wonder, combined, give origin to religion; their abuses produce superstition.

19. Ideality.—*Uses:* Love of the beautiful, desire of excellence, poetic feeling.—*Abuses:* Extravagant and absurd enthusiasm, preference of the showy and glaring to the solid and useful, a tendency to dwell in the regions of fancy and to neglect the duties of life.

19*a*. Unascertained, supposed to be connected with the sentiment of the Sublime.

20. Wit.—Gives the feeling of the ludicrous, and disposes to mirth.
21. Imitation.—Copies the manners, gestures, and actions of others, and appearances in nature generally.

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## Order II. INTELLECTUAL FACULTIES.

### Genus I. EXTERNAL SENSES.

Feeling of Touch.
Taste.
Smell.
Hearing.
Sight.

*Uses:* To bring man into communication with external objects, and to enable him to enjoy them.—*Abuses:* Excessive indulgence in the pleasures arising from the senses, to the extent of impairing bodily health, and debilitating or deteriorating the mind.

### Genus II. KNOWING FACULTIES WHICH PERCEIVE THE EXISTENCE AND QUALITIES OF EXTERNAL OBJECTS.

22. Individuality.—Takes cognizance of existence and simple facts.
23. Form.—Renders man observant of form.
24. Size.—Gives the idea of space, and enables us to appreciate dimension and distance.
25. Weight.—Communicates the perception of momentum, weight, and resistance; and aids equilibrium.
26. Colouring.—Gives perception of colours, their harmonies and discords.

### Genus III. KNOWING FACULTIES WHICH PERCEIVE THE RELATIONS OF EXTERNAL OBJECTS.

27. Locality.—Gives the idea of relative position.
28. Number.—Gives the talent for calculation.
29. Order.—Communicates the love of physical arrangement.
30. Eventuality.—Takes cognizance of occurrences or events.
31. Time.—Gives rise to the perception of duration.
32. Tune.—The sense of melody and harmony arising from it.
33. Language.—Gives facility in acquiring a knowledge of arbitrary signs to express thoughts, readiness in the use of them, and the power of inventing and recollecting them.

Genus IV. REFLECTING FACULTIES, WHICH COMPARE, JUDGE, AND DISCRIMINATE.

34. COMPARISON.—Gives the power of discovering analogies, resemblances, and differences.

35. CAUSALITY.—Traces the dependences of phenomena, and the relation of cause and effect.

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LIST OF THE VARIOUS EDITIONS OF GEORGE COMBE'S PRINCIPAL WORKS.

Essays on Phrenology ; or an Inquiry into the Principles and Utility of the System of Drs Gall and Spurzheim, and into the objections made against it. 8vo. Edin. 1819.—Another Edition. 8vo. Philadelphia, 1822.

Phrenological Observations on the Cerebral Development of David Haggart, who was lately executed at Edinburgh for murder. 12mo. Edin. 1821.

Elements of Phrenology. 1st Ed. 12mo. Edin. 1824.—2d Ed. 1825.—4th Ed. 1836.—6th Ed. 1845.—7th Ed. 1850.—8th Ed. 1855.

Nouveau Manuel de Phrénologie ; ouvrage traduit de l'Anglais et augmenté d'additions nombrenses et de notes, par le Docteur J. Fossati. 12mo. Paris, 1836.

Letters to Francis Jeffrey, Esq., in answer to his Criticism on Phrenology, contained in No. 88 of the *Edinburgh Review*. 1st and 2nd Editions. 8mo. Edin. 1826.

The Constitution of Man, considered in relation to external objects. 12mo. Edin. 1828.—Another Edition. 12mo. Boston, 1829.—"Alexandrian" Edition. 8vo. New York, 1835.—Another Edition, with an additional chapter on the Harmony between Phrenology and Revelation, by Joseph A. Warne, A.M. 12mo. Boston, 1835. (This is entitled the Fourth American from the Second English Edition.)—5th Ed. 8vo. Edin. 1835.—Another Edition. Abridged for the use of families and schools. 8vo. Edin. 1838.—6th Ed. 8vo. Edin. 1844.—7th Ed. 8vo. Edin. 1847.—8th Ed. 1858.—9th Ed. 1860. People's Editions, &c., see pages 262, 263, vol. i.—Another Edition, adapted to the use of schools, 12mo. New York, 1855.—Another Edition, traduit de l'Anglais par du Prosper Dumont. 8vo. Paris, 1834.—Abhandlung über das Wesen

des Menschen und sein Verhältnis zur Aussenwelt; als Beitrag die Menschlichen Lebensverhältnisse besser und glücklicher zu machen. Aus dem Englischen von Dr Edward Hirschfeld. 8vo. Mannheim, 1846.

Notes in answer to Mr Scott's remarks on Mr Combe's Essay on the Natural Constitution of Man. 8vo. Edin. 1827.

Answer to the attack on "The Constitution of Man," contained in "Nature and Revelation Harmonious; a defence of Scripture truths assailed in Mr George Combe's work on the Constitution of Man. By the Rev. C. J. Kennedy, Paisley." 8vo. Edin. 1848.—2d Ed., 1857.

Answer to "Observations on the Phrenological Development of Burke, Hare, and other atrocious murderers, &c. By Thomas Stone, Esq.," &c. 8vo. Edin. 1829.

Letter on the Prejudices of the great in Science and Philosophy against Phrenology; addressed to the Editor of the *Edinburgh Weekly Journal.* 8vo. Edin. 1829.

Lectures on Popular Education, delivered to the Edinburgh Association for procuring instruction in Useful and Entertaining Science, in April and November, 1833. First American Edition. 12mo. Boston, 1834.—2d American Ed. 12mo. Boston, 1839.—2d Ed. 12mo. Edin. 1837.—3d Ed. 8vo. Edin. 1848.

Outlines of Phrenology, first published in the "Transactions of the Phrenological Society," 1823, and separately, 8vo, 1824.—5th Ed., 1835.—6th, 1836.—7th, 1838.—8th, 1844.—9th, 1854.

Testimonials on behalf of George Combe, as a Candidate for the Chair of Logic in the University of Edinburgh. 8vo. Edin. 1836.—Additional Testimonials on behalf of George Combe, as a Candidate for the Chair of Logic in the University of Edinburgh. 8vo. 1836.

The Suppressed Documents, or an Appeal to the Public against the Conductors of the *Scottish Guardian.* 8vo. Glasgow, 1836.

Lectures on Moral Philosophy, delivered before the Edinburgh Philosophical Society. 12mo. Boston, 1836.—Another Ed. 12mo. Boston, 1840.

Moral Philosophy, or the Duties of Man considered in his Individual, Social, and Domestic Capacities. 1st Ed. 8vo. Edin. 1840.—2d Ed. 1841.—3d Ed. 1846.

On the Functions of the Cerebellum. By Drs Gull, Vimont, and Broussais. Translated from the French by George Combe. Also, Answers to the Objections urged against Phrenology by Drs Roget, Rüdolphi, Prichard, and Tiedemann. By George Combe and Dr A. Combe. 8vo. Edin. 1838.

Lectures on Phrenology, with Notes: An Introductory Essay, and an Historical Sketch. By Andrew Boardman. 12mo. London, 1839.—American Ed. 12mo. New York, 1839.—2d Ed. 12mo. New York, 1840.

An Address, delivered at the Anniversary Celebration of the Birth of Spurzheim and the Organisation of the Boston Phrenological Society, Dec. 31, 1839. 8vo. Boston, 1840.

Notes on the United States of North America during a Phrenological Visit in 1838–9–40. In three volumes, 8vo. Edin. 1841.—Another Ed. In two vols. 8vo. Philadelphia, 1841.

System of Phrenology. The 1st Ed. was entitled Essays on Phrenology. 2d Ed. 8vo. 1825.—3d Ed. 1830.—2d American (from 3d Edin.) Ed. 8vo. Boston, 1834.—4th Ed. 2 vols. 8vo. Edin. 1836.—5th Ed. Edin. 1843.—5th Ed., revised. 8vo. Edin. 1853.

System der Phrenologie. Aus dem Englischen übersetzt von Dr S. Ed. Hirschfeld. 8vo. Brannschweig, 1833.

Notes on the New Reformation in Germany, and on National Education, and the Common Schools of Massachussets. 8vo. Edin. 1845.

Thoughts on Capital Punishment. 8vo. Edin. 1847.

Remarks on National Education. 1st and 2d Editions. 8vo. Edin. 1847.—5th Ed. 1848.

On the Relation between Religion and Science. 1st and 2d Editions, 8vo. Edin. 1847.—4th Ed., enlarged, and entitled On the Relation between Science and Religion, 8vo. Edin. 1857.—5th Ed. 1872.

Die Wissenschaft in ihrer Beziehung zur Religion. Von Georg Combe. Deutsche Originalausgabe. Unter Mitwirkung des Verfassers nach der 4ten. Auflage des englischen Originals bearbeitet von Ida v. Busse. Leipzig, 1857.

What should Secular Education Embrace? 3 Editions, 8vo. Edin. 1848.

Moral and Intellectual Science applied to the Elevation of Society. By George Combe, Robert Cox, and others. 8vo. New York, 1848.

The Life and Correspondence of Andrew Combe, M.D. 8vo. Edin. 1850.

Secular Education. Lecture on the comparative influence of the Natural Sciences and "The Shorter Catechism" on the Civilisation of Scotland. 8vo. Edin. 1851.

Secular Instruction, or Extension of Church Endowments? Letter to His Grace the Duke of Argyll. 8vo. Edin. 1852.

An Inquiry into Natural Religion, its Foundation, Nature, and Applications. Printed for private circulation, Edin. 1853, and included in the 4th Ed. of "Science and Religion," 1857.

Notes on a Visit to Germany in 1854. 8vo. Edin. 1854.

Remarks on the Principles of Criminal Legislation, and the Practice of Prison Discipline. 8vo. London, 1854.

Phrenology applied to Painting and Sculpture. 8vo. London, 1855.

Refutations Refuted: A Reply to Pamphlets put forward in answer to "The Currency Question Considered." 8vo. London, 1856.

On Teaching Physiology and its applications in Common Schools. 8vo. Edin. 1857.

The Currency Question Considered in relation to the Act of the 7th and 8th Vict., chap. 32, commonly called "The Bank Restriction Act." 10th Edition. 8vo. London, 1858.

Our Rule in India. 8vo. Edin. 1858.

Phrenological Development of Robert Burns, with Remarks by George Combe. Edited by Robert Cox. 8vo. Edin. 1859.

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